

NO. 96-31380

NATURAL RESERVES GROUP, INC.,

Plaintiff

v.

BAKER HUGHES, INCORPORATED, et al.

Defendants.

§
§
§
§
§
§
§
§
§

IN THE DISTRICT COURT OF

HARRIS COUNTY, TEXAS

333RD JUDICIAL DISTRICT

**PLAINTIFF'S RESPONSE TO DEFENDANTS' AMENDED
MOTION FOR SUMMARY JUDGMENT ON ALL CLAIMS
IN PLAINTIFF'S FIRST AMENDED ORIGINAL PETITION**

Plaintiff Natural Reserves Group, Inc. ("NRG") responds to Defendants' Amended Motion for Summary Judgment (the "Amended Motion") on all Claims in Plaintiff's First Amended Original Petition as follows:

SUMMARY OF RESPONSE

1. NRG is a small oil and gas exploration and production company. Baker Hughes, Inc. with its divisions, ("Baker Hughes") is an oil and gas service company, which provides equipment, material, drilling services, and completion services to oil and gas exploration and production companies. In October 1991, NRG developed several new and innovative methods for completing multilateral wells, including a method and means to seal the junction between the vertical and one or more horizontal wellbores of such wells. NRG believed its completion method had numerous applications and great potential value, and was so innovative that it was patentable. Because it was a small company, however, and not in the business of selling equipment or completion services, it decided to seek an alliance with a large service company.

2. In December 1991, NRG met with representatives of Baker Hughes and offered to enter into an agreement under which Baker Hughes and NRG would jointly develop NRG's

completion concept. Baker Hughes believed NRG's project to be innovative and unique in nature, and was interested in some type of joint development, enough so to execute confidentiality agreements, in order for NRG to disclose its concept to Baker Hughes in confidence. After Baker Hughes entered into the confidentiality agreements, NRG disclosed its completion concept to Baker Hughes.

3. From December 1991 through September 1992, NRG and Baker Hughes met at least seven times. At each of these meetings, NRG asked Baker Hughes whether they had technology similar to NRG's completion concept, and on every occasion Baker Hughes responded that they did not have, nor did they know of, any similar technology. Baker Hughes told NRG during these meetings that it was still evaluating the technology to determine whether they wanted to jointly develop it with NRG. Baker Hughes never told NRG that they were not interested in NRG's proposal; rather, after making a number of full presentations of its concept to numerous representatives of Baker Hughes from January to September 1992, without any result, NRG eventually gave up and decided to stop spending significant time and effort on the project.

4. Unbeknownst to NRG, however, as early as December, 1991 or January, 1992, Baker Hughes had stolen NRG's method to seal the junction and as early as April, 1992 were presenting it to their customers as their own. Further, and again without NRG's knowledge and at the same time they were telling NRG that they were still considering NRG's proposal, and that they believed it had substantial merit, Baker Hughes was preparing patent applications in order to patent NRG's concept in Baker Hughes' name. On August 7, 1992, while still engaging NRG in meetings, Baker Hughes surreptitiously filed a patent application covering NRG's concept. Not knowing that Baker Hughes was preparing a patent on its concept, and relying on Baker Hughes' assurances that they did not have the technology and that they were still considering NRG's

proposal, NRG waited until September 10, 1992 before filing its own patent application on its technology. NRG's patent issued on April 12, 1994, and Baker Hughes' patent issued on June 21, 1994.

5. In February 1995, Baker Hughes contacted NRG and asked if they could either purchase or license NRG's patent. Baker Hughes still did not disclose to NRG that they had obtained a patent on NRG's technology. Nevertheless, while meeting with other service companies to see if they had any interest in licensing the patent, NRG discovered on March 22, 1995, that Baker Hughes had patented NRG's technology.

6. While considering a lawsuit against Baker Hughes in 1995, NRG decided to capitalize on the value of its patented technology by licensing it to other service companies. However, adding insult to injury, Baker Hughes in January, April and June, 1996 wrote letters to NRG's licensees threatening to sue them for infringement of the Baker Hughes patent if they used the NRG technology. On June 21, 1996, NRG filed this suit against Baker Hughes for breach of contract, misappropriation of trade secrets, fraud, breach of fiduciary duty, breach of the duty of good faith and fair dealing, unjust enrichment and conspiracy.

7. On July 21, 1997, Baker Hughes filed three motions for summary judgment: (1) Defendants' Motion for Summary Judgment on All Claims Based on Defendants' Independent Development of Information Contained in Baker Hughes' Patents (the "Independent Development Motion"), (2) Defendants' Motion for Partial Summary Judgment on NRG's Fourth and Fifth Causes of Action (the "Fiduciary Duty Motion"), and (3) Defendants' Motion for Partial Summary Judgment Based on the Statute of Limitations (the "Limitations Motion"). On September 12, 1997, Baker Hughes filed the Amended Motion, in which Baker Hughes

incorporates by reference the three earlier motions and raises several grounds not raised in the original three motions.

8. In the three earlier motions, Baker Hughes claimed (a) that they had conclusively established that they independently developed the technology at issue (b) as a matter of law, Baker Hughes did not owe NRG a fiduciary duty or the duty of good faith and fair dealing, and (c) with the exception of the breach of contract and fraud claims, NRG's claims are barred by limitations because NRG had constructive notice of its claims when Defendants' patent issued. The additional grounds that Baker Hughes raises in the Amended Motion are (a) the confidentiality agreements between Baker Hughes and NRG did not require Baker Hughes to disclose that it allegedly had independently developed the technology at issue, (b) NRG did not rely to its detriment on Baker Hughes' misrepresentations, and (c) a fiduciary such as Baker Hughes does not have a duty of full disclosure. As discussed below, Baker Hughes' motion for summary judgment should be denied in its entirety.

9. Baker Hughes Independent Development Motion should be denied for three separate reasons: (a) Baker Hughes' only alleged evidence of independent development is the testimony of the claimed inventor, and as a matter of law, such testimony standing alone will not support summary judgment, (b) NRG has submitted summary judgment evidence controverting all of Baker Hughes' evidence so there is a genuine issue of material fact concerning independent development, and (c) even if Baker Hughes independently developed the technology, NRG's breach of contract, fraud, breach of fiduciary duty, and breach of the duty of good faith and fair dealing claims would still be viable.

10. Baker Hughes' Fiduciary Duty Motion should be denied because Texas law provides that when a party receives confidential information for the purpose of evaluating

whether to enter a business deal related to the information, the receiving party enters into a confidential relationship with the disclosing party. There is a fact issue concerning whether NRG disclosed the information to Baker Hughes under such circumstances that a confidential relationship was created.

11. Baker Hughes' Limitations Motion should be denied for two reasons: (a) it is based entirely on a constructive notice theory and, under Texas law, a fiduciary is not entitled to rely on the constructive notice doctrine, and (b) NRG has submitted summary judgment evidence showing that there is a fact question concerning when Baker Hughes' patents were actually available to the public, thus precluding summary judgment for Baker Hughes on limitations grounds.

SUMMARY JUDGMENT EVIDENCE

12. In support of this response, NRG relies upon and hereby incorporates by reference the summary judgment evidence that it submitted with Plaintiff's Response to (a) Defendants' Motion for Summary Judgment on All Claims Based on Defendants' Independent Development of Information Contained in Baker Hughes' Patents, (2) Defendants' Motion for Partial Summary Judgment on NRG's Fourth and Fifth Causes of Action, and (3) Defendants' Motion for Partial Summary Judgment Based on the Statute of Limitations (the "First Response"). Such evidence includes the following:

(A) the affidavit of Stephen A. Graham (the "Graham Affidavit"), a copy of which is attached to the First Response as Exhibit A;

(B) the affidavit of Roger D. Scales (the "Scales Affidavit"), a copy of which is attached to the First Response as Exhibit B;

(C) the expert affidavit of Kenneth E. Kuffner (the "Kuffner Affidavit"), a copy of which is attached to the First Response as Exhibit D;

(D) the following Depositions, Documents and Exhibits:

The depositions, documents and exhibits listed below all are products of discovery. The entire transcript of each listed deposition is relied upon by NRG as summary judgment evidence, with particular reliance on the pages separately identified.

DEPOSITION TRANSCRIPTS

ATKINSON: 60, 75, 78, 80 - 97, 105, 112 - 113
BANGERT: 18 - 19, 29 - 30, 36 - 37, 40 - 41, 48 - 49, 53 - 54, 70, 78
CURINGTON: 12 - 13, 37, 42 - 43
FALTIN: 20 - 23, 36 - 37
McNAIR: 44 - 46
McSTRAVICK: 25, 28 - 29, 31, 58 - 59
MULLINS: 58 - 61
MURRAY: 54 - 55, 107 - 108
NAZZAL: 71, 119, 158 - 159,
NEWMAN: 27 - 28
NEWTON: 24 - 25, 100
OGDEN: 29 - 30
RICHARDSON: 52 - 54
SCALES, B. 221, 297, 346
TILTON: 73, 114 - 117
TRICHEL: 18 - 23, 38 - 39, 47, 53, 59, 73 - 75
WHITE: 20 - 23, 100-101, 107, 204 - 209, 216, 267 - 269, 301, 319 - 320
ZEISSIG: 98

NRG DOCUMENTS

Bates Numbers:

NRG0000482 - 512	NRG0004769 - 4770
NRG0000653 - 660	NRG0004771 - 4908
NRG0000912	NRG0004931 - 4935
NRG0003960	NRG0004926 - 4930
NRG0004026	NRG0004909 - 4925
NRG0004027 - 28	NRG0005151
NRG0004735 - 4760	

BAKER HUGHES DOCUMENTS

Bates Numbers:

B000003 - 5

PLAINTIFF'S EXHIBITS

PX 4	PX 36	PX 127
PX 5	PX 37	PX 132
PX 6	PX 38	PX 149
PX 8	PX 40	PX 151
PX 9	PX 43	PX 155
PX 10	PX 63	PX 163
PX 11	PX 65	PX 164
PX 23	PX 71	PX 166
PX 24	PX 78	PX 167
PX 25	PX 85	PX 170
PX 32	PX 86	PX 171
PX 33	PX 94	
PX 34	PX 126	

DEFENDANT'S EXHIBITS

DX 1	DX 46
DX 15	DX 47
DX 42	DX 48
DX 43	DX 49
DX 45	DX 50

NRG also relies upon and hereby incorporates by reference the amended expert affidavit of Professor Michael J. Economides (the "Economides Affidavit"), a copy of which is attached to this response as Exhibit C, the expert affidavit of Charles R. "Rick" Stone (the "Stone Affidavit"), a copy of which is attached to this response as Exhibit E, and the affidavit of Bert F. Scales (the "Bert Scales Affidavit"), a copy of which is attached to this response as Exhibit F. Finally, NRG requests that the Court take judicial notice of its file in this case, and NRG hereby incorporates by reference all of the pleadings and discovery that are in the Court's file. In the event that Baker Hughes objects to the authenticity or admissibility of any of the above documents (most of which came from the files of Baker Hughes), NRG hereby requests a

continuance of the hearing in order to obtain the discovery necessary to satisfy Baker Hughes' objections.

SUMMARY JUDGMENT FACTS¹

A. NRG's Development of the Technology.

13. NRG is an oil and gas exploration and production company. In Summer 1991, NRG owned oil and gas leases covering acreage in the Saratoga Field of Hardin County, Texas. The Saratoga Field is an older shallow field with relatively heavy oil. Oil is "heavy" if it is very thick and does not flow easily. For a number of years, operators in the Saratoga Field tried improved oil recovery techniques to increase the amount of oil that can be recovered from a well, but none of these techniques met with much success. NRG determined that an entirely new method of drilling and completing wells in the Saratoga Field was necessary to achieve a significant increase in production over the typical well in the Saratoga Field.

14. On or about July 15, 1991, Stephen A. Graham ("Graham") began work as the Operations Manager for NRG. Graham was assigned the task of developing a drilling and completion method to increase production from the Saratoga Field.

15. Before coming to work at NRG, Graham had worked on horizontal drilling projects in the Austin Chalk Trend. Based on that experience, Graham decided that a horizontal drilling and completion system might solve many of the problems in the Saratoga Field. Graham was somewhat familiar with application of horizontal drilling and completion techniques for heavy oil recovery in Canada using the "Steam Assisted Gravity Drainage" process (the "SAGD Process"). The SAGD process involved pumping steam into the oil reservoir to heat the heavy

¹ Unless otherwise indicated, the facts set forth above are based upon and derived from the Graham Affidavit submitted in support hereof. Since Graham in his affidavit identifies the documents relevant to his testimony, those documents are merely referred to by identification number in this statement of facts. Documents, testimony, and any other products of discovery referred to herein were filed with the Clerk of the Court with the First Response.

oil, thus making it flow easier, and driving it to other wells from which it is produced. Starting in or about August 1991, Graham started to work on designing a horizontal drilling and completion system to solve the Saratoga Field problems.

16. Graham's first contact with anyone at Baker Hughes concerning the development of a horizontal drilling and completion technique for the Saratoga Field occurred in August 1991, when he spoke with Greg Nazzal ("Nazzal") of Eastman Christensen ("Eastman"). Eastman was the Baker Hughes division responsible for equipment and services related to the drilling of a well, and supplied tools and personnel to oil companies and other customers for the drilling of horizontal wells. Nazzal and Graham had recently co-authored a paper on horizontal drilling in the Austin Chalk, and Nazzal was calling to let Graham know that they each had received a plaque to commemorate the paper. During this conversation, Graham told Nazzal about the Saratoga Field challenges and his interest in using the SAGD Process as a solution. On August 9, 1991, Nazzal faxed Graham a copy of a paper from the Oil and Gas Journal which highlighted the successes operators were having with this technique in Canada.²

17. After reviewing the Oil and Gas Journal article, Graham was impressed with the performance of the then recent Canadian applications and so began detailed work on developing a SAGD Process to apply in the Saratoga Field. Graham started his work by contacting numerous oilfield equipment vendors and service companies to gather information about what "off-the-shelf" products were available and what they could do. Early on in Graham's work, it became apparent to him that the horizontal well completion systems available to the industry in 1991 fell short of meeting the design requirements for a SAGD project in the Saratoga Field.

18. Due to the relatively small reservoirs in the Saratoga Field and the low formation pressures, Graham decided that the best SAGD process for the Saratoga Field would involve

completing multiple short radius horizontal wells from a single vertical well. A "short radius" horizontal well is what the name implies, a bore hole that moves from the vertical to the horizontal within a relatively short number of feet, from forty to sixty, thus the radius of the curve it describes is relatively "short";³ Eastman Christensen by December of 1991 had spent considerable time, effort and expense to develop its expertise in this method of drilling.⁴ The concept Graham was developing provided for the drilling of one or more short radius horizontal wellbores branching off from a new or existing vertical wellbore.

19. One of the problems Graham encountered was finding an effective way to complete the juncture between the cased vertical and horizontal wellbores without restricting the ability to access the vertical wellbore below the juncture or to reenter the horizontal wellbore. In 1991, the horizontal wells then being drilled and completed by the industry in formations such as those seen in the prolific Austin Chalk trend were completed as "barefoot" or "open hole", i.e. the juncture between the vertical and horizontal wellbores was completed for production without installing casing. Unlike the Austin Chalk, formations such as those seen in the Saratoga Field reservoirs consist of highly unconsolidated sand grains, which means that these oil-bearing sands are very loosely held together and have practically no cementation between particles. When a well is drilled into unconsolidated sands, the sands tend to cave in unless a casing or some type of sand control is utilized to hold the hole open. In the Saratoga Field, the juncture would need to be completed in some manner to keep the horizontal wellbore open.

20. When the SAGD technique is used in unconsolidated sands, the well needs a good seal at the juncture between the vertical and horizontal wellbore. Without a good seal at the juncture, the steam pumped into the reservoir will bypass the heavy oil and flow directly into the

² Exhibit PX 71

³ Trichel deposition, pp 18-23

vertical wellbore near the juncture without accomplishing anything. In 1991, after much investigation, Graham was not able to find any company which offered a horizontal completion system that solved the above problems.

21. In October 1991, after working on the project for approximately 160 hours, Graham conceived of and documented a multilateral well drilling and completion system which he believed would work in the Saratoga Field. One very important aspect to the completion system was the method Graham invented to solve the above described problems associated with the juncture between the vertical and horizontal wellbores. October 15, 1991 hand written notes by Graham showing the earliest documentation of his concept are referenced by Graham in his affidavit.⁵ The October 15, 1991 notes show that, as of that date, Graham had conceived a step by step process, or system, of how to drill the horizontal well and seal the juncture.

22. The specific part of the NRG System that Baker Hughes misappropriated from NRG includes the following steps: (a) run a liner into the horizontal wellbore leaving a portion of the liner protruding into the previously cased and cemented vertical wellbore; (b) pump cement into the liner, allowing the cement to flow through the annulus of the liner and fill the area between the liner and the rock wall of the horizontal wellbore, with enough excess to flow up and beyond the juncture and into the vertical wellbore; (c) run a cutting tool, i.e. a "burning shoe," down the vertical wellbore and cut over the protruding cement and liner, as well as the downhole deviation tool, i.e. "whipstock"; and then (d) remove all overcut material and debris, to include cement, liner, deviation tool, and cuttings. The above procedure can be repeated in the same vertical well for multiple horizontal laterals, and will result in a good cemented juncture between the vertical and horizontal wellbores without a reduction in the diameter of the vertical wellbore.

⁴ Trichel, pp 20-21

⁵ NRG0000653-660

The above procedure is the technology that Baker Hughes denies it stole from NRG and claims to have independently developed (the "Technology").

B. NRG's First Disclosure to Baker Hughes of the Technology.

23. Graham and NRG recognized that the Technology had potential far beyond its utilization only at the Saratoga Field. However, NRG is not in the business of marketing drilling and completion systems. Before spending additional time and effort on the project, NRG decided in November 1991 to present the Technology to a major service company to get their opinions concerning the novelty, patentability and feasibility of the concept. NRG also determined that the expertise and capital of a major service company would be necessary to fully capitalize on the concept, so NRG decided to seek some type of joint venture with a service company to develop the Technology.

24. On November 4, 1991, Graham met with Mike Watson ("Watson"), an Eastman directional drilling sales representative, to solicit interest for the Technology. The meeting was held at NRG's office. Graham did not disclose the Technology to Watson at this meeting, but he did explain to him generally the problems NRG thought it could solve. Graham told Watson that NRG was interested in joining with Baker Hughes to further develop the Technology. NRG offered to let Baker Hughes use the Saratoga Field as a test bed to try out the Technology. Graham also told Mr. Watson that, if the Technology was patentable, NRG would be interested in jointly patenting the process with Baker Hughes. Watson said it sounded great and that he would find out which Baker Hughes representative(s) would need to be involved and what the game plan should be. Graham also explained to Watson that NRG considered the Technology to be confidential, and that NRG would require a written secrecy agreement before making the formal presentation.

25. Shortly after the meeting, Watson called Graham and offered to have several Eastman short radius drilling engineers come over to talk about the Technology. On November 13, 1991, Eastman engineers Keith Trichel ("Trichel") and Joel Creider ("Creider") came to NRG and met Graham. Graham did not disclose the Technology to Trichel or Creider, but he told them what NRG thought it could do and that NRG was interested in jointly developing it with Baker Hughes. On November 14, 1991, Nazzal sent Graham a letter in which he stated that he had talked with Trichel, and that he was interested in getting more details about the Technology.⁶

26. During December, 1991, Graham had a number of telephone conversations with Watson in which they discussed Baker Hughes taking a detailed look at the Technology and its potential pilot application in the Saratoga Field. Graham also had similar telephone conversations with Trichel and Grahame Newton ("Newton"), a horizontal drilling manager with Eastman. On December 3, 1991, Graham faxed Watson a copy of NRG's proposed confidentiality agreement, a general description of the Technology, and an explanation of how the Technology could add value in the oil field.⁷

27. On December 5, 1991, Graham met with Watson, Trichel, and Creider to raise their level of interest in the project and give Watson an original hardcopy of the proposed confidentiality agreement. Graham recalls disclosing to Watson, Trichel and Creider the general aspects of the Technology. Trichel testified that Graham disclosed enough at this meeting for him to understand the system.⁸ Trichel acknowledged in his deposition that Graham told him that NRG was interested in having Baker Hughes work with NRG to further develop the

⁶ Exhibit PX 38

⁷ B000003-5

⁸ See Trichel, Page 38 line 9 through page 39 line 18.

Technology and to become co-applicants with NRG on a patent of the Technology.⁹ Trichel also testified that Graham told him, and that he understood, that the information that he was disclosing to Trichel was to be kept in confidence.¹⁰ After his meeting that day with Graham, Trichel prepared a memorandum to Roger Fincher, Trichel's immediate supervisor at Eastman, summarizing the meeting.¹¹ Trichel summarized NRG's position as follows:

He [Graham] has asked if Eastman Christensen is interested in pursuing a patent on the methodology as a co applicant in conjunction with his company. He has asked us because he believes that our parent company Baker Hughes has the infrastructure, patent attorneys, and connections to make it happen. . . . He has asked Eastman Christensen to sign a confidentiality agreement about the process (Mike Watson has a copy of this document) whether or not we decide to pursue the above course of action.

C. Baker Hughes' Customers were Demanding a Completion System to Solve the Same Problems Graham Encountered in the Saratoga Field, and Baker Hughes Didn't Have One.

28. Baker Oil Tools ("Baker Oil Tools") is the Baker Hughes division responsible for well completions.¹² In 1991, one of its employees Cameron White ("White") had the primary responsibility with respect to multilateral completions.¹³

29. On May 10, 1991, approximately seven months before Trichel's December 5, 1991 memorandum to his boss, Roger Fincher, Cameron White sent a memorandum to Baker Oil Tools employee Dave McStravick ("McStravick") on the subject of "Multiple Lateral Horizontal Completions."¹⁴ McStravick was head of the Baker Oil Tools Research Department.¹⁵ In the memorandum, White asked for McStravick's help in "getting the ball rolling" to find a solution to the multiple lateral horizontal completions problem. In the memorandum, White explains that

⁹Trichel, Page 47 lines 13 through 25; page 59 lines 12 through 18.

¹⁰ Trichel, Page 53 lines 7 through 25.

¹¹ Exhibit PX 37, Trichel, Page 41 line 21 through page 42 line 9.

¹² Nazzari, Page 119 lines 16 through 18

¹³ Bangert, Page 22 lines 16 through 25.

¹⁴ Exhibit PX 32.

¹⁵ Curington, Page 12 line 7 through page 13 line 5.

Baker Oil Tools has numerous potential customers looking to Baker Oil Tools for a new multilateral completion system. White described the situation and the problem as follows:

Multiple lateral horizontal wells have been drilled and documented (see attached SPE paper draft and article from Eastman Christensen). However, such wells have all been completed open hole. All of the operators listed above cannot live with open hole completions, and need to do far more than just drill laterals and run a packer in the vertical casing uphole like the Austin Chalk wells. According to Eastman Christensen, the drilling technology is available today to drill multiple lateral horizontal wells, and it is my opinion that the lack of completion technology for such wells is what is constraining the industry.

The primary challenge I see is the design of the "Y" joint where the lateral joins the main wellbore. This joint should be pressure tight and you would have to be able to re-enter it selectively with either a work string or coiled tubing.

* * *

I feel that multiple lateral completions could be a major technological discontinuity which would have an enormous impact on the industry. (emphasis added) The potential for cost savings and increased recovery for operators is tremendous. The reactions I have gotten from the operators listed above echo this enthusiasm.

For Baker to proceed any further towards a solution to the multiple lateral completion problem, I feel that we need to generate some ideas and concepts for how to tackle the problem. I realize that the requirements I have given are rather vague, but it is difficult to pin down an operator on specific requirements for an idea that is so new and radical. (emphasis added) My experience has shown that the process is iterative: that is, we show operators some concepts of how to solve the problems they have expressed, and we get further feedback and refinement of the needs. We then refine our concepts, and the process is repeated. As the concepts are refined further and further, we may reach a point where we can request industry funding or decided to develop it on our own. Confidentiality is crucial in this process.

It is apparent from White's memorandum that, in 1991, Baker Oil Tools' customers were demanding that Baker Oil Tools come up with a method to solve the exact same problems that Graham was trying to solve in the Saratoga Field. Baker Oil Tools was looking for a completion method that would do exactly what the NRG Technology was designed to do. It is also apparent

from White's memorandum that he anticipated it would require substantial effort to develop a viable concept, and it would require an "iterative" process to develop the concept.

D. Baker Hughes Can't Solve the Problem.

30. Finding a solution to sealing the juncture was one of Baker Oil Tools' top priority projects.¹⁶ Indeed, according to White, the future of Baker Oil Tools was dependent upon coming up with a viable method for sealing the juncture.¹⁷ In May 1991, the Research Department was given the task of inventing a method to seal the juncture.¹⁸ On October 10, 1991 Daniel Bangert wrote a memo to McStravick, with copies to Cameron White, and others, in which he stated "...the Houston Product Managers have reviewed their long-term needs and developed a short list of potential Research Projects. The first two, Multi-Lateral Completions and Permanent Packer Sealing Technology, are considered to be the top priority...How to seal casing at vertical well junction and how to re-enter the different laterals when needed."¹⁹

31. However, by December 1991, despite months of effort, the Research Department had designed only one concept for sealing the juncture, which was totally dissimilar from the NRG Technology.²⁰ At some point in 1991, White became dissatisfied with the results of the Research Department in arriving at a solution to seal the juncture.²¹ Indeed, by the end of 1991, there was general dissatisfaction at Baker Oil Tools concerning the work product from the Research Department, and it eventually was disbanded because it did not come up with any concepts or ideas. ("it would probably be deemed a non-success").²² By December 1991, Baker

¹⁶ Exhibit PX 33, Tilton, Page 73 lines 13 through 25.

¹⁷ Exhibit PX 32; White, Page 100 line 24 through page 101 line 11.

¹⁸ McStravick, Page 25 lines 14 through 24, Page 28 line 22 through page 29 line 13, page 31 lines 10 through 15.

¹⁹ Exhibit PX 33

²⁰ Exhibit PX 63; McStravick, page 58 line 3 through page 59 line 2; Curington, Page 42 line 13 through page 43 line 3.

²¹ White, Page 107 lines 6 through 22.

²² Mullins, Page 58 line 14 through page 61 line 5; Richardson, Page 52 line 17-Page 54 line 17

Oil Tools had been working on trying to solve the problem for over six months, and they had no workable solution.

E. Baker Oil Tools Learns About NRG's Technology From Eastman in December 1991.

32. In his May 10, 1991 Memorandum to McStravick discussing his thoughts on the project, White stated:

Any completion design will, of course, have to be compatible with the drilling methods and techniques. There may also be additional equipment requirements for drilling the multiple laterals such as retrievable whipstocks, etc. Eastman Christensen can provide us with virtually anything we need to know about the drilling aspects. I can also foresee some sort of joint development program with Eastman Christensen with the goal of providing an integrated drilling & completion system.

White regularly stayed in contact with Eastman. According to Trichel, White was his contact at Baker Oil Tools, and he would contact him whenever he had any questions concerning completions.²³ Newton of Eastman Christensen also testified that he knew White, and that White was his contact at Baker Oil Tools.²⁴ The evidence shows that White planned to work with Eastman on developing a Baker Oil Tools multiple lateral horizontal completions system, and that he had regular contact with Eastman.

33. As shown above, Trichel met with NRG on December 5, 1992. In Newton's Daytimer, there is an entry under December 6, 1991 stating: "Cameron 1:30 - Completions for multiples."²⁵ Just above this entry, Newton wrote: "Canceled - K. Trichel to sit in for me." The day after meeting with NRG and hearing about the NRG Technology, Baker Hughes' documents show that Trichel met with White to discuss multilateral completions. Given the circumstances, Trichel undoubtedly told White about the NRG Technology.

²³ Trichel, Page 73 line 23 through page 75 line 2.

²⁴ Newton, Page 24 lines 21 through 25.

²⁵ Exhibit PX 163.

34. Daniel Bangert ("Bangert"), the person that Defendants claim independently developed the NRG Technology on January 7, 1992, was White's boss in December 1991.²⁶ On October 10, 1991, just two months before White's meeting with Trichel, Bangert stated in a memorandum that multilateral completions were "considered to be the top priority."²⁷ In Bangert's Daytimer, the entry for December 6, 1991 states: "EC short radius drilling project." EC apparently stands for Eastman Christensen. Trichel's specific job with Eastman in December 1991 was to provide technical data on short radius drilling.²⁸ Bangert learned about the NRG Technology in December 1991, either from White or directly from Trichel.

F. Communications Continue between NRG and Baker Hughes.

35. On December 11, 1991, Graham received a fax from Newton conveying a proposed confidentiality agreement drafted by Baker Hughes along with a memorandum to Newton from Baker Hughes's in-house attorney, Gerald Spinks.²⁹ On December 13, 1991, Graham received a copy of the confidentiality agreement executed by Eastman. NRG executed the confidentiality agreement on December 16, 1991.³⁰

36. On December 19, 1991, Graham met with Morris Eddy and Johnny Fox of Baker Service Tools. The purpose of the meeting was to solicit interest from another Baker Hughes division. Later that afternoon, Graham faxed Morris Eddy a copy of the Eastman Confidentiality Agreement and asked that Baker Service Tools execute one just like it.³¹ Baker Service Tools executed the confidentiality agreement on January 6, 1992,³² and NRG executed it on January 13, 1992. Baker Service Tools entered into a second confidentiality agreement on January 24,

²⁶ White, Page 20 lines 7 through 23; Bangert, Page 18 line 24 through page 19 line 6.

²⁷ Exhibit PX 33.

²⁸ Trichel, Page 20 lines 16 through 21.

²⁹ Exhibit PX 23.

³⁰ Exhibit PX 36.

³¹ Exhibit PX 6.

³² Exhibit PX 8.

1992.³³ Also on January 23, 1992, Baker Sand Control entered into a confidentiality agreement with NRG.³⁴

37. On or about January 4, 1992, Graham sent Greg Price, Vice President of Eastman, a written disclosure of the NRG system.³⁵ The January 4, 1992 disclosure contained a description of the NRG Technology. The three confidentiality agreements, referred to above are identical in all material respects, and they are collectively referred to below as the "Confidentiality Agreements".

G. Baker Hughes' Claim of Independent Development.

38. Baker Hughes claims that Baker Oil Tools held a "brainstorming meeting" on January 7, 1992, and at this meeting Bangert independently developed the exact same concept as the NRG Technology. Most of the alleged participants in the January 1992 meetings have no recollection of Bangert presenting any completion concept.³⁶ Furthermore, there is absolutely no record at Baker Hughes with respect to an alleged meeting on January 7, 1992.³⁷ Bangert's story is as follows: Prior to going to the meeting, Bangert had done no design work on multilateral completions, and he had not even thought about how to solve the problem.³⁸ Prior to the meeting, he had not discussed the technical aspects of multilateral completion technology with anyone else, and he had not reviewed the prior work of anyone else at Baker Oil Tools with respect to multilateral technology.³⁹ In contrast to Graham's 160 hours of development work, and contrary to the iterative process that White stated would be necessary to develop a concept,

³³ Exhibit PX 9.

³⁴ Exhibit PX 25.

³⁵ Exhibit DX 1.

³⁶ Bangert, Page 36 line 14-Page 37 line 11; Billy Ray Newman, Page 27 line 18-Page 28 line 14; Tilton, Page 107 line 25-Page 108 line 18; McStravick, Page 59 line 18-Page 60 line 22; Curington, Page 14 line 15-Page 17 line 18; Murray, Page 54 line 6-Page 55 line 3; Page 107 line 21-Page 108 line 20.

³⁷ White, February 19, 1997, Page 50 line 19-22

³⁸ Bangert, Page 33 line 24 though page 34 line 9

³⁹ Bangert, Page 33 line 24 though page 34 line 9

Bangert claims that he designed the entire process at the meeting perhaps "in a flash" or "it may have been five minutes."⁴⁰ Furthermore, Bangert cannot remember even the most elementary details about the meeting at which he claims to have conceived his invention, nor did he keep any sketch of his concept that he prepared at the meeting, and his earliest documentation of the concept was January 28, 1992.⁴¹ Finally, after allegedly inventing the concept at the meeting, Bangert does not recall having any further involvement with or doing any subsequent work on the development of the technology.

Deposition of Daniel Bangert

		Page	Line
Q.	How many brainstorming sessions did you attend in January, 1992?	29	6
A.	One.		
Q.	Do you have an independent recollection that the date was January 7?	29	9
A.	No, I don't.		
Q.	It's based on your review of the materials that you --	29	12
A.	Based on my Daytimer entry and the disclosure document.		
Q.	Okay. Who was at the meeting on January 7 that you recall?	29	16
A.	I don't recall all of the attendees. I remember that Doug Murray was there, and I don't recall the specifics of other people.		
Q.	Doug Murray's the only one you can remember?	29	21
A.	That's the only one I can recall at this time. You have to remember, it was six years ago.		
Q.	But you don't remember them being present?	30	3
A.	I'm certain they were, but I don't recall their -- their physical presence.		
Q.	How many people approximately do you recall at the meeting?	30	6
A.	I would -- I would be guessing if I gave you a number.		
Q.	And did you describe your concept to the other people at the meeting?	36	9
A.	I would imagine I did, yes. I don't recall the specifics of that descriptive review of the idea.		
Q.	Well, do you recall what words you used to describe your concept?	36	14
A.	No, I don't.		
Q.	Others have said that you did a sketch at that meeting to depict the concept. Do you remember doing such a sketch?	36	17
A.	I have no recollection of getting up in front of the group and making a sketch on a whiteboard or a flip chart or anything of that nature.		

⁴⁰ Bangert, Page 35 lines 16 through 20

⁴¹ Bangert, Page 37 lines 3 through 11

		Page	Line
Q.	Do you have any recollection of, after the meeting was over, taking such a sketch with you and doing something with it?	37	3
A.	No, I don't.		
Q.	Other than the sketches attached to your invention disclosure, employee invention disclosure form, do you have any other sketches of the concept from the January 7, meeting.	37	7
A.	No, I don't.		
Q.	Do you know if any other people at the meeting made a sketch of your idea?	37	12
A.	No, I don't.		
Q.	When did you first do a sketch of the idea you had at the January 7, 1992, meeting?	40	5
A.	Well, you stated that I had sketched it there. I don't have a recollection of that, but obviously January the 7 th was -- would have been the first sketch. It was documented for the invention agreement on the 28 th , I believe.		
Q.	(By Mr. Ford) I didn't state you sketched it on that date, Mr. Bangert. Other witnesses have said you did that.	40	18
A.	Oh, all right.		
Q.	But you still have no recollection of presenting a sketch at the meeting of January 7, 1992?	40	22
A.	I do not.		
Q.	Okay. So the question is, when did you first do a sketch of your concept?	41	1
A.	I don't remember.		
Q.	What do you recall about what you told people at Baker Oil Tools after January 7 about the fact you had conceived of an idea at the brainstorming meeting?	48	22
A.	I have no recollection of any discussions with anyone--		
Q.	You don't recall --	49	3
A.	-- after that meeting.		
Q.	-- telling anyone about it.	49	5
A.	No, I don't.		
Q.	Okay. After your attendance at the meeting you've told us about in January, 1992, what was your next involvement with respect to multilateral completion technology?	70	7
A.	I don't remember.		
Q.	All right. While you were still at Baker Hughes, what did you have in your invention file, if anything, with regard to your concept arising out of the January 7 meeting?	78	15
A.	Nothing.		

Bangert receives a \$1,000.00 a day from Baker Hughes for his testimony in this case,⁴² so he is not a disinterested witness, and presumably has an incentive to remember as much as he can in favor of Baker Hughes.

39. According to White, Ron Curington of Baker Oil Tools took notes at the alleged January 7, 1992 meeting showing the concepts they came up with, but apparently—or conveniently—those notes have been lost, if they ever existed.⁴³ Strangely, Baker Hughes did keep Curington's notes describing concepts which were discussed at a January 9, 1992 brainstorming meeting, but there is no reference in those notes to Bangert having invented anything, nor does Curington remember keeping any notes at a January 7, 1992 meeting.⁴⁴

H. The NRG/Baker Hughes Meetings.

40. During the first week in January 1992, Graham spoke on the telephone with Newton concerning the NRG Technology. Graham described the NRG Technology to Newton in great detail, and told him that NRG wanted to meet with the Baker Hughes group as soon as possible. Newton said he had just returned from a long trip, but was now able to focus on scheduling such a meeting. Newton requested a meeting with NRG on January 13, 1992 to get a preview of what NRG planned to present to the Baker Hughes group.

41. On January 13, 1992, Newton met at NRG's offices with the following NRG representatives: Graham, Bert Scales, and Hilmar Zeissig. Bert Scales was and is the President of NRG, and Zeissig was a Vice President. Graham provided Newton with a detailed written disclosure of the NRG Technology.⁴⁵ NRG also presented a detailed overhead slide presentation describing the technical aspects of the process, the economic aspects to field application, and

⁴² Bangert, Page 53 line 19 through page 54 line 18

⁴³ See Exhibit PX 10; White, Page 213 line 19 through page 214 line 20.

⁴⁴ Exhibit PX 43, Curington, Page 24 lines 12 through 23.

⁴⁵ Exhibit PX 5

NRG's proposal to jointly develop the technology with Baker Hughes. The slides were made from the drawings contained in the written disclosure. This was also true of the subsequent slides NRG showed to Baker Hughes. NRG asked Newton whether he had seen similar technology, and Newton said he had not. Newton said words to the effect that he believed the NRG Technology was very promising and that he wanted NRG to make a presentation to a group of Baker Hughes representatives from other divisions. Newton explained that Baker Hughes was looking for a fully integrated solution to drilling and completing short radius multi-lateral wells such as in the Saratoga Field. He indicated that finding such a solution had not been easy for Baker Hughes due to the autonomy of the different Baker Hughes divisions. The meeting was concluded with the understanding NRG would meet with representatives from the other Baker Hughes divisions within the next few weeks.

42. Newton telephoned Graham on January 20, 1992 to schedule the Baker Hughes group meeting for January 24, 1992. He also requested that Graham fax him additional cost estimate and economic analysis information to facilitate his preparation for the upcoming meeting between NRG and the Baker Hughes group. Graham faxed the material to Newton.⁴⁶

43. On January 24, 1992, Bert Scales, Zeissig, and Graham meet with a large group of technology and marketing managers of the different Baker Hughes divisions. The following Baker Hughes representatives participated in the meeting: Newton, Wolfgang Schoebel, and Trichel from Eastman Christensen, White from Baker Oil Tools, Steve Bird and Steve Ogden of Baker Service Tools, and Scott Gill and Reggie Boggs of Baker Oil Tools. Graham passed out another explicit written disclosure of the NRG Technology to the meeting participants.⁴⁷

⁴⁶ Exhibit DX 15

⁴⁷ NRG0004735-4760; PX 65; PX 166

44. At the January 24, 1992 meeting, Graham made another detailed slide presentation, fully disclosing the technical aspects of the process, the economic aspects to field application, and NRG's proposal to jointly develop the NRG Technology with Baker Hughes. NRG made clear to the Baker Hughes representatives that the purpose of the disclosure was to allow Baker Hughes to evaluate the NRG Technology to determine whether Baker Hughes was interested in jointly developing the Technology. The Baker Hughes representatives expressed a strong interest in the NRG Technology.

45. Bert Scales asked the Baker Hughes representatives to provide feedback as to the novelty of the NRG Technology.⁴⁸ The Baker Hughes representatives stated that they had not seen the Technology before and that they believed it was novel. The Baker Hughes representatives asked questions regarding the mechanical feasibility of the Technology and they suggested that they could probably improve some of the specific steps to reduce the cost and mechanical risk. No one from Baker Hughes told NRG at the January 24, 1992 meeting—or at any meeting prior to 1995—that Baker Hughes claimed to have independently developed the same technology that NRG disclosed to them.⁴⁹ Had Baker Hughes informed NRG in these first meetings that it was working on the same technology, NRG would have taken that to mean that it had hit upon a very valuable technology; NRG would have immediately have filed a patent application on the NRG Technology and sought out an arrangement with another oil and gas service company.⁵⁰ The Baker Hughes representatives promised to get back with NRG as soon as possible regarding a path forward, but suggested it may take some time due to the size of the Baker Hughes organization.

⁴⁸ Scales deposition, pp [221, 297, 346]

⁴⁹ In addition to the Graham Affidavit, see Newton, page 100 lines 16 through 20; Ogden, page 29 line 21 through page 30 line 11.

⁵⁰ Bert Scales Affidavit.

I. The Cover-up Begins.

46. According to Baker Hughes, White was supposedly at the meeting allegedly held on January 7, 1992 where Bangert presented the NRG Technology as his own. According to Steve Ogden, White was reluctant to participate in the January 24, 1992 meeting; Ogden said that White seemed "very nervous," and that White said he did not think Baker Hughes should be meeting with NRG.⁵¹ Ogden testified that White said the reason he did not think Baker Hughes should meet with NRG had to do "with confidentiality stuff."⁵² Graham denies that White said anything to him at the January 24, 1992 meeting (or at anytime thereafter) to the effect that NRG should be aware that Baker Hughes had developed or was developing the same technology.

47. On January 28, 1992, just four days after the NRG/Baker Hughes meeting, White sent a memorandum to Doug Murray, David McStravick, Ron Curington and Tom Tilton of Baker Oil Tools in which he stated: "In reviewing Ron Curington's notes from the multilateral brainstorming session on Jan. 7, I came across two ideas other than Dan's idea for milling the cemented liner off flush that we should probably document a little better."⁵³ White then asked them to "draw a rough sketch of your idea, date it with the day you conceived the idea (Jan. 7), and today's date, and sign it." As noted earlier, Baker Hughes has not produced any notes from the alleged January 7, 1992 brainstorming meeting, and Curington testified that he does not recall taking any such notes. Also on January 28, 1992, Bangert prepared an Employee Invention Disclosure form ("EID") in which he attached drawings showing a detailed eight step procedure that, in all material respects, is identical to the NRG Technology.⁵⁴ In the EID, Bangert claims to have conceived the NRG Technology at the alleged January 7, 1992 meeting.

⁵¹ Ogden, page 30 lines 13 through 20.

⁵² Ogden, page 30 lines 21 through 23.

⁵³ Exhibit PX 10; also Exhibit 23 to Defendants Independent Development Motion.

⁵⁴ Exhibit PX 11; Also Exhibit 22 to Defendants' Independent Development Motion.

The January 28, 1992 EID, however, is the earliest documentation of Bangert's alleged independent development of the NRG Technology.⁵⁵ It is witnessed January 28, 1992, rather than January 7th because, as Baker Oil Tools witness Ron Curington, one of the two Baker Oil Tools employees who witnessed the EID put it, "I never backdated one."⁵⁶

J. Defendants Continue to String NRG Along.

48. On January 30, 1992, Newton and Alan Atkinson ("Atkinson"), staff attorney for Baker Hughes, came to NRG's office and met with Bert Scales, Zeissig, and Graham regarding their continued interest in the NRG Technology. Bert Scales or Zeissig directly inquired about Baker Hughes's internal search with respect to whether or not they thought the NRG Technology was novel. Both Newton and Atkinson said that they thought it was novel, but that further research was necessary to confirm it. When NRG asked what it could do to expedite the evaluation process, Atkinson suggested that NRG should have a patent search performed to confirm that there was no prior patent covering the NRG Technology. Atkinson even suggested that NRG should use a patent lawyer that Baker Hughes had used in the past. Neither Newton nor Atkinson told NRG that Baker Hughes was not interested in jointly developing the NRG Technology, and they did not tell NRG of Baker Hughes' claim to have independently developed the Technology.

49. Unbeknownst to NRG, however, Baker Hughes by January 30, 1992, had already decided that it was not going to work with NRG to jointly develop the Technology.⁵⁷ When asked why he did not disclose to NRG that Baker Hughes had decided to patent the NRG Technology, Atkinson testified that "it was none of [their] business."⁵⁸ On February 10, 1992,

⁵⁵ White, Page 216 lines 1 through 11.

⁵⁶ Curington, page 37

⁵⁷ See Atkinson, Page 60 lines 16 through 24;

⁵⁸ Atkinson, Page 105 lines 10 through 14.

Graham sent Atkinson a letter (with a copy to Graham Newton) conveying the results of the patent search, along with numerous other materials, including a proposal for Baker Hughes to take a license from NRG on the NRG system.⁵⁹ Atkinson admits receiving the February 10, 1992 materials from NRG,⁶⁰ and he testified that he never told NRG in response to the letter that Baker Hughes was not interested or that Baker Hughes had developed the NRG Technology on its own.⁶¹ On February 13 and February 14, 1992, NRG sent additional disclosure material to Baker Hughes, including "bullet charts" which compared, point by point, the advantages of the NRG Technology over prior completion methods.⁶² On February 14, 1992, NRG sent Atkinson a summary of a patent search that NRG had performed at the request of Atkinson.⁶³ Atkinson admitted having received the summary, but he "ignored it and threw it away."⁶⁴

50. On March 11, 1992, White had a drafter at Baker Oil Tools prepare computer drawings of seven multi-lateral completion concepts, one of which was the NRG Technology, and titled the collection "Baker Oil Tools Multi-Lateral Completion Concept."⁶⁵ From March 27, 1992 through April 9, 1992, White went on a trip to Europe and, without the knowledge of NRG, presented the NRG Technology, as depicted in the Baker Oil Tools Multi-Lateral Completion Concept, to various customers of Baker Oil Tools as one of Baker Oil Tools' concepts.⁶⁶ NRG did not agree or consent to Baker Oil Tools disclosing the NRG Technology, and NRG certainly never agreed that Baker Oil Tools owned the NRG Technology.

51. While this was going on, Baker Hughes continued to bring NRG in for meetings to address the NRG Technology. NRG came to Baker Hughes again on April 27, July 30, and

⁵⁹ Exhibit PX 127, PX 170

⁶⁰ Atkinson, Page 75 lines 17 through 23.

⁶¹ Atkinson, Page 78 line 4 through page 80 line 2.

⁶² Exhibit PX 126, PX 171

⁶³ Graham Affidavit.

⁶⁴ Atkinson, Page 112 line 15 through page 113 line 4.

⁶⁵ See Exhibit PX 34; White, Page 267 line 24 through page 269 line 19.

September 3, 1992.⁶⁷ At each of the meetings, NRG asked Baker Hughes whether they knew of anyone, including Baker Hughes, who was working on the same technology that NRG had disclosed to them, and in each case, Baker Hughes told NRG that they did not know of anyone who was working on the same technology.⁶⁸ In fact, Baker Hughes' own witnesses have admitted that they never told NRG that Baker Hughes had independently developed the Technology.⁶⁹ Baker Hughes also did not tell NRG that they were going to file a patent application on the Technology.⁷⁰ At the July 30, 1992 meeting the NRG representatives informed Baker Hughes that NRG intended to file an application on the NRG technology within one month.⁷¹ After the September 1992 meeting, (almost a month after Baker Hughes had filed a patent application), and despite Baker Hughes' continued assurances that they were still interested in a joint development, NRG finally gave up on marketing its technology through Baker Hughes and went back to working on oil and gas exploration and production work.

K. Baker Hughes Patents the NRG Technology.

52. Without NRG's knowledge or consent, Baker Hughes filed a patent application on the NRG Technology on August 7, 1992.⁷² Not realizing that there was a race going on, NRG did not file its own patent application on the NRG Technology until September 10, 1992. Had Baker Hughes told NRG back in January 1992, of Baker Hughes' independent development claim, NRG would have filed its application in January 1992.⁷³ NRG received United States Patent 5,301,760, which covers the NRG Technology, on April 12, 1994. On June 21, 1992,

⁶⁶ White, Page 269 lines 11 through 19; page 301 lines 15 through 23, page 319 line 23 through page 320 line 6.

⁶⁷ See Graham Affidavit.

⁶⁸ See Graham Affidavit; Scales, Page 221 lines 1 through 22; Scales, Page 297 lines 2 through 25; Scales, Page 346 lines 18 through 24.

⁶⁹ See Newton, Page 100 lines 7 through 20; Ogden, Page 29 lines 21 through 29; Nazzal, Page 71 lines 12 through 25; Nazzal, Page 158 line 20 through page 159 line 4.

⁷⁰ Graham Affidavit; Newton, Page 100 lines 7 through 20; Ogden, Page 29 lines 21 through 29; Nazzal, Page 71 lines 12 through 25; Nazzal, Page 158 line 20 through page 159 line 4.

⁷¹ Zeissig, Page 98 lines 2-26

United States Patent 5,322,127, which also includes the NRG Technology, was issued to Defendants.⁷⁴

L. Baker Hughes Tries to Buy NRG's Patent Before NRG Finds Out About the Baker Hughes Patent.

53. There were no communications between NRG and Baker Hughes related to the NRG Technology from September 1992, until February 9, 1995, when NRG received a letter from Jerry Dunlap, Esq. of the law firm of Dunlap & Coddling PC.⁷⁵ Dunlap's letter advised NRG that he represented a client who was interested in obtaining a license or acquiring NRG Patents 5,289,876; 5,301,760 (which covers the NRG Technology at issue); and 5,337,808 (the "NRG Patents"). NRG called Dunlap and asked him who he represented, but he refused to tell NRG, stating that his clients wished to remain anonymous.⁷⁶ The very next day, NRG received a telephone call from Carl Rowald ("Rowald"), Chief Patent Counsel for Baker Hughes, in the course of which Rowald admitted that Dunlap was working for Baker Hughes.⁷⁷ Rowald told NRG that Baker Hughes wanted to license or purchase the NRG Patents.⁷⁸ A meeting between NRG and Baker Hughes was scheduled for February 13, 1995.⁷⁹

54. On February 13, 1995, Bert Scales, Roger Scales, Finance Manager of NRG and Graham, met at NRG's offices with Rowald and Frank Richardson, Vice-President of Engineering of Baker Oil Tools.⁸⁰ In the course of the meeting, Richardson stated that the NRG Patents covered a valuable technology, and that this technology was to their knowledge not being

⁷² Exhibit I to Defendants Independent Development Motion.

⁷³ Bert Scales affidavit.

⁷⁴ Exhibit I to Defendants Independent Development Motion.

⁷⁵ Scales Affidavit.

⁷⁶ Scales Affidavit; (NRG0005151)

⁷⁷ Scales Affidavit.

⁷⁸ Scales Affidavit.

⁷⁹ Scales Affidavit.

⁸⁰ Scales Affidavit.

utilized by any other companies, including Baker Hughes.⁸¹ NRG and Baker Hughes discussed what type of deal NRG would be interested in, either an outright acquisition of the NRG Patents by Baker Hughes, or a license.⁸²

55. NRG and Baker Hughes met again on February 17, 1995 and March 24, 1995, and exchanged offers concerning the purchase or licensing of NRG's Patents, but no agreement could be reached.⁸³ At no time during the course of these meetings did Baker Hughes make any mention of any patents it had been granted that utilized the NRG Technology (the "Baker Hughes Patents"), and none of the NRG representatives knew anything about the Baker Hughes Patents.⁸⁴

56. On March 22, 1995, NRG met with members of Schlumberger's multi-lateral completion team, who expressed a great deal of interest in licensing the NRG patents, but also expressed concern over a series of Baker Hughes patents that, in their opinion, were markedly similar to the NRG Patents.⁸⁵ Schlumberger provided NRG with the patent numbers of the Baker Hughes Patents and suggested that this issue must be resolved prior to further discussions regarding licensing of the NRG Patents by Schlumberger.⁸⁶ Within days after the meeting with Schlumberger, Graham went to Rice University and obtained copies of the Baker Hughes Patents.⁸⁷ The March 22, 1995 meeting with Schlumberger was the first time that anyone at NRG heard anything about Defendants having obtained a patent on the NRG Technology.⁸⁸

M. NRG Licenses the NRG Patents to Sperry and Halliburton and Baker Hughes Promptly Threatens Them.

⁸¹ Scales Affidavit.

⁸² Scales Affidavit.

⁸³ Scales Affidavit.

⁸⁴ Scales Affidavit; Graham Affidavit;

⁸⁵ Scales Affidavit.

⁸⁶ Scales Affidavit.

⁸⁷ Scales Affidavit.

⁸⁸ Scales Affidavit.

57. After discovering in 1995 that Baker Hughes had misappropriated the NRG Technology, NRG decided that, while considering a lawsuit against Baker Hughes, it would obtain whatever value it could from the NRG Patents by licensing them to other service companies. NRG licensed the NRG Patents to Sperry-Sun Drilling Services, Inc. ("Sperry") and Halliburton Energy Services, Inc. ("Halliburton").⁸⁹ Had NRG filed its patent application in January 1992 and approached Sperry and Halliburton at that time, as it would have done but for NRG's reliance on Baker Hughes' statements through September 1992 that Baker Hughes did not have the NRG Technology and was interested in jointly developing it, the Technology would have been much more valuable to NRG.⁹⁰

58. On January 29, 1996, Baker Hughes sent a letter to Sperry threatening to sue Sperry if it continued to use the NRG Technology. On April 25, 1996 and June 4, 1996, Baker Hughes sent letters to Halliburton threatening to sue Halliburton if it continued to use the NRG Technology.⁹¹

ARGUMENT AND AUTHORITIES

I. RESPONSE TO THE INDEPENDENT DEVELOPMENT MOTION

A. Introduction.

59. Baker Hughes claims it is entitled to summary judgment on all of NRG's claims because it has established that there is no genuine issue of material fact concerning its claim to have independently developed the NRG Technology at a January 7, 1992 "brainstorming" meeting. Baker Hughes only summary judgment evidence to support its claim of conclusively establishing independent development is the following:

⁸⁹ Exhibits DX 42, DX 43.

⁹⁰ Bert Scales Affidavit.

⁹¹ Scales Affidavit.

- (a) the testimony of Daniel S. Bangert, the claimed inventor;
- (b) the testimony of Robert McNair;
- (c) the testimony of F. Thomas Tilton;
- (d) the testimony of Louis Cameron White;
- (e) Bangert's January 28, 1992 Employee Invention Disclosure;
- (f) a reference in a January 28, 1992 memorandum prepared by Cameron White; and
- (g) Bangert's and Tilton's daytimer entries showing that there was a meeting scheduled on January 7, 1992.

Baker Hughes' Independent Development Motion should be denied because (a) Baker Hughes' summary judgment evidence does not negate the existence of a genuine issue of material fact, and (b) NRG's controverting summary judgment evidence raises numerous fact issues concerning whether Baker Hughes independently developed the NRG Technology. Additionally and alternatively, even if Baker Hughes independently developed the NRG Technology, it would not defeat NRG's claims for breach of contract, fraud, breach of fiduciary duty and breach of the duty of good faith and fair dealing.

B. Baker Hughes Has Failed to Conclusively Establish That it Independently Developed the Technology.

(1) Summary Judgment Standards

60. "The summary judgment proceeding is not designed to deny a party the right to trial by jury, but to 'eliminate patently unmeritorious claims.'" *Hernandez v. Lukefahr*, 879 S.W.2d 137, 140 (Tex. App.—Houston [14th Dist.] 1994, no writ); *see also Augustine v. Bell Helicopter Textron, Inc.* 922 S.W.2d 287, 291 (Tex. App.—Fort Worth 1996, writ denied) ("The purpose of summary judgment is not to deprive a litigant of his or her right to trial by jury, but to

eliminate *patently unmeritorious* claims.”). To prevail, Baker Hughes must show that each of NRG’s claims are patently unmeritorious.

61. “Summary judgment is proper if the movant establishes that there are no genuine issues of material fact and that he or she is entitled to judgment as a matter of law.” *Wornick Co. v. Casas*, 856 S.W.2d 732, 733 (Tex. 1993). To prevail on a summary judgment, a defendant must conclusively negate at least one of the essential elements of each of the plaintiff’s causes of action or conclusively establish all of the elements of an affirmative defense. *Cathey v. Booth*, 900 S.W.2d 339, 341 (Tex. 1995). A matter is conclusively established only “if ordinary minds cannot differ as to the conclusion to be drawn from the evidence.” *Zep Manufacturing Co. v. Harthcock*, 824 S.W.2d 654, 657-58 (Tex. App.—Dallas 1992, no writ).

62. In deciding whether there is a genuine issue of material fact, the court “must accept all evidence favorable to the non-movant as true, indulging every reasonable inference and resolving all doubts in favor of the non-movant.” *Casas*, 856 S.W.2d at 733. However, because of the severity of the summary judgment rule, “the burden of proof weighs heavily on a movant in a motion for summary judgment.” *McKnight v. Riddle & Brown, P.C.*, 877 S.W.2d 59, 61 (Tex. App.—Tyler 1994, writ denied). As shown below, Defendants have failed to meet their burden of proof.

(2) Bangert’s Testimony is Insufficient Evidence of Independent Development.

63. Baker Hughes claims that the testimony of Bangert, McNair, Tilton and White establishes that Bangert invented the Technology. That is not, however, the testimony of McNair, Tilton or White. McNair testified that the first time he saw the Technology was some time “in early 1992” when Bangert drew it on a board during a meeting.⁹² White’s testimony is

⁹² McNair, Page 44 line 23 through page 46 line 17.

also limited to a claim of having seen Bangert present the Technology at a meeting.⁹³ Tilton testified that he did not remember Bangert presenting the Technology at the January 7, 1992 meeting,⁹⁴ but he stated that he would not have witnessed Bangert's Employee Invention Disclosure form if it was not correct.⁹⁵ Neither Tilton nor Curington would agree to back-date Bangert's EID to January 7, 1992, however; they both dated it January 28, 1992 and, according to Curington, "he never backdated one".⁹⁶ At most, the testimony of McNair and White show that Bangert presented the Technology as his own at a meeting in early January 1992.

64. Billy Ray Newman, Tom Tilton, David McStravick, and Ron Curington among others, also claim to have attended the January 7, 1992 meeting, but they do not remember Bangert presenting any concept at the meeting and, of course, Bangert does not even remember drawing any concepts at the meeting.⁹⁷ The testimony of McNair, White and Tilton does not negate NRG's contention that Bangert based his presentation on NRG's disclosures nor does it demonstrate that he developed the technology independently. McNair and Tilton had no way of knowing whether Bangert had seen or heard of (or discussed with Trichel) the NRG disclosures prior to the alleged meeting, and White was a link between Eastman Christensen (Trichel and Newton) and Bangert. The testimony of McNair, White and Tilton are equally consistent with Bangert having relied on the NRG disclosure as his not relying on it, thus their testimony is no evidence that Bangert independently developed the Technology. *See Transport Ins. Co. v. Faircloth*, 898 S.W.2d 269, 278 (Tex. 1995) (if the circumstances are consistent with either of two facts and nothing shows that one is more probable than the other, neither fact can be inferred).

⁹³ White, page 204-209.

⁹⁴ Tilton, page 114 lines 1 through 5.

⁹⁵ Tilton, page 115 line 15 through page 117 line 5.

⁹⁶ Curington, page 37.

⁹⁷ See Page 18 *supra*, and footnotes 36 and 37 and Bangert's testimony at pp 19-20, *supra*.

65. The scant documentary evidence relied upon by Baker Hughes also shows, if anything, only that Bangert presented the NRG Technology at a meeting. The daytimer entries simply show that there was a meeting scheduled by White. White's memorandum also just shows that Bangert presented the idea as his own at a meeting. Bangert's EID was created three full weeks after the alleged meeting, and the credibility of the statements in the EID are solely dependent on Bangert's credibility. Thus it is apparent that Defendants' only summary judgment evidence showing independent development is the testimony of Bangert. Only Bangert can testify concerning what he knew and did not know when he presented the NRG Technology as his own.

(3) Bangert's Testimony Will not Support a Summary Judgment.

66. Baker Hughes paid Bangert \$1,000.00 a day to testify for them and Baker Hughes agreed to keep paying him for any further work he does on this case,⁹⁸ so he obviously has an interest in assisting Baker Hughes. Furthermore, Bangert is the named inventor of the Technology on a United States Patent, so he is interested in maintaining his story that he invented the Technology on January 7, 1992. As set forth above, Baker Hughes' motion is based entirely on Bangert's testimony that he did not know of the NRG disclosures prior to January 7, 1992. Thus, Baker Hughes' summary judgment is based entirely on the testimony of an interested witness who receives a \$1,000.00 a day for his testimony.

67. Rule 166a(c) provides that a summary judgment may be based on uncontroverted testimonial evidence of an interested witness only if such evidence is "clear, positive and direct, otherwise credible and free from contradictions and inconsistencies, and could have been readily controverted." Tex. R. Civ. P. 166b(c). The phrase "could have been readily controverted" means that the "testimony at issue is of a nature which can be effectively countered by opposing

evidence.” *Casso v. Brand*, 776 S.W.2d 551, 558 (Tex. 1989). “If the credibility of the affiant or deponent is likely to be a dispositive factor in the resolution of the case, then summary judgment is inappropriate.” *Id*

68. “Self-serving statements of interested parties testifying about what they knew . . . are not readily controvertible and will not support a motion for summary judgment.” *Clark v. Pruett*, 820 S.W.2d 903, 906 (Tex. App.—Houston [1st Dist.] 1991, no writ) *see also Hayes v. E.T.S. Enterp., Inc.*, 809 S.W.2d 652, 657 (Tex. App.—Amarillo 1991, writ denied) (the testimony of an interested witness concerning what the witness knew does no more than raise a fact issue and will not support a summary judgment); *McKight v. Riddle & Brown, P.C.*, 877 S.W.2d 59 (Tex. App.—Tyler, 1994, rehearing denied, 1994) (issues of intent and knowledge of alleged co-conspirators are not susceptible of being readily controverted and are best left to the determination of the trier of fact). Baker Hughes’ own summary judgment evidence shows that NRG orally and in writing disclosed the NRG Technology to Baker Hughes in December 1991, and Graham testifies that he sent another disclosure to Baker Hughes on or about January 4, 1992. Bangert clearly had the opportunity to see the NRG disclosures prior to January 7, 1992. The ultimate issue on the trade secret claim is thus whether or not Bangert in fact did know of the NRG disclosures prior to the alleged meeting of January 7, 1992.

69. Bangert’s credibility concerning his knowledge of the NRG disclosures will be one of the dispositive factors in the resolution of the trade secret aspects of this case, and his testimony that he did not know of the disclosures is not readily controvertible by NRG. For these reasons, Bangert’s testimony will not support a summary judgment for Baker Hughes. Accordingly, because Bangert’s testimony is Baker Hughes’ only evidence of independent

⁹⁸ Bangert, page 53 line 19 through page 54 line 18.

development and such evidence will not support a summary judgment, Baker Hughes' Independent Development Motion should be denied.

C. NRG's Controverting Summary Judgment Evidence Raises a Fact Issue Concerning Whether or not Bangert Independently Developed the Technology.

(1) The Trichel/White/Bangert Connection.

70. Keith Trichel of Eastman Christensen testified that Stephen Graham explained the Technology to him at a meeting on December 5, 1991.⁹⁹ However, Baker Hughes claims that the Court should ignore this disclosure of the Technology to Baker Hughes because Bangert worked for Baker Oil Tools, "and virtually no communication took place between the two companies on any subject." (Defendants' Independent Development Motion, page 11-12). Defendants further claim as an "undisputed fact" that in 1991-92, there was no communication between Baker Oil Tools and Eastman Christensen "concerning the subject of sealing the junction between a vertical wellbore and a lateral wellbore." (Defendants' Independent Development Motion, page 12). Baker Hughes' own documents and testimony, however, tell a very different story concerning the relationship between Baker Oil Tools and Eastman Christensen generally, and Trichel, Cameron White and Bangert specifically.

71. In 1991, Cameron White had the primary responsibility at Baker Oil Tools with respect to multilateral completions.¹⁰⁰ On May 10, 1991, Cameron White sent a memorandum to Dave McStravick on the subject of "Multiple Lateral Horizontal Completions."¹⁰¹ In the memorandum, White asks for McStravick's help in "getting the ball rolling" on multiple lateral horizontal completions. In discussing his thoughts on the project, White stated:

⁹⁹ Trichel, Page 38 line 9 through page 39 line 18.

¹⁰⁰ Bangert, Page 22 lines 16 through 25.

¹⁰¹ Exhibit PX 32

Any completion design will, of course, have to be compatible with the drilling methods and techniques. There may also be additional equipment requirements for drilling the multiple laterals such as retrievable whipstocks, etc. Eastman Christensen can provide us with virtually anything we need to know about the drilling aspects. I can also foresee some sort of joint development program with Eastman Christensen with the goal of providing an integrated drilling & completion system.

(Exhibit PX 32, page B001075). From the beginning, White planned to work with Eastman Christensen on developing the multiple lateral horizontal completions.

72. White regularly stayed in contact with Eastman Christensen. According to Trichel, White was his contact at Baker Oil Tools, and he would contact him whenever he had any questions concerning completions.¹⁰² Grahame Newton of Eastman Christensen also testified that he knew White, and that White was his contact at Baker Oil Tools.¹⁰³ There clearly was contact in late 1991 and early 1992 between Baker Oil Tools and Eastman concerning multilateral completions, and Baker Hughes' claim that there was virtually no communication between the two is simply not true.

73. On October 10, 1991, finding a solution to sealing the juncture still was one of Baker Oil Tools' top priority projects.¹⁰⁴ Indeed, according to White, the future of Baker Oil Tools was dependent upon coming up with a viable method for sealing the juncture.¹⁰⁵ At that time, McStravick was head of the Baker Oil Tools Research Department.¹⁰⁶ In May 1991, the Research Department was given the task of inventing a method to seal the juncture.¹⁰⁷ However, by December 1991, the Research Department had designed only one concept for sealing the

¹⁰² Trichel, Page 73 line 23 through page 75 line 2.

¹⁰³ Newton, Page 24 lines 21 through 25.

¹⁰⁴ Exhibit PX 33, Tilton, Page 73 lines 13 through 25.

¹⁰⁵ Exhibit PX 32; White, Page 100 line 24 through page 101 line 11.

¹⁰⁶ Curington, Page 12 line 7 through page 13 line 5.

¹⁰⁷ McStravick, Page 25 lines 14 through 24, Page 28 line 22 through page 29 line 13, page 31 lines 10 through 15.

juncture, which was totally dissimilar from the NRG Technology.¹⁰⁸ At some point in 1991, White became dissatisfied with the results of the Research Department in arriving at a solution to seal the juncture.¹⁰⁹ Indeed, as noted, by the end of 1991, there was general dissatisfaction at Baker Oil Tools concerning the work product from the Research Department, and the entire department was disbanded in 1992.¹¹⁰ Thus, as of December 6, 1991, the picture we see is that Baker Oil Tools is desperate to find an effective way to seal the juncture, in fact its future was dependent upon it, White is spear-heading the effort, Baker Oil Tools has nothing to solve the problem, and White has lost confidence in the Baker Oil Tools Research Department's ability to find a solution.

74. As noted, Trichel met with NRG on December 5, 1992. In Graham Newton's Daytimer, there is an entry under December 6, 1991 stating: "Cameron 1:30 - Completions for multiples."¹¹¹ Just above this entry, Newton wrote: "Canceled - K. Trichel to sit in for me." The day after meeting with NRG and hearing about the Technology, Defendants' documents show that Trichel met with White to discuss multilateral completions. In light of all of the circumstances described above, it is difficult to believe that in a meeting supposedly scheduled to specifically consider multilateral completions, Trichel would not have mentioned to White the "innovative" completion concept he had seen just the day before.¹¹²

75. Furthermore, Bangert was White's boss in December 1991,¹¹³ and Bangert just two months before on October 10, 1991, had stated in a memorandum to Dave McStravick that

¹⁰⁸ Exhibit PX 63; McStravick, page 58 line 3 through page 59 line 2; Curington, Page 42 line 13 through page 43 line 3.

¹⁰⁹ White, Page 107 lines 6 through 22.

¹¹⁰ See Page 15, *supra*, and footnote 22.

¹¹¹ Exhibit PX 64

¹¹² See Trichel's December 5, 1991 Memorandum, Exhibit PX 37

¹¹³ White, Page 20 lines 7 through 23; Bangert, Page 18 line 24 through page 19 line 6.

multilateral completions were "considered to be top priority."¹¹⁴ Given the high priority on multilateral completions, it would be very surprising had White not informed his boss of an innovative multilateral completion technique that he had just heard about and which was going to be fully disclosed to Eastman on January 13, 1992.

76. There is even evidence directly linking Bangert to Trichel on December 6, 1991. In Bangert's Daytimer, the entry for December 6, 1991 states: "EC short radius drilling project." Trichel's specific job in December 1991 was to provide technical data on short radius drilling.¹¹⁵ A very reasonable inference can be made that the person Bangert met with was Trichel.

77. In *Felker v. Petrolon, Inc.*, 929 S.W.2d 460 (Tex. App.—Houston [1st Dist.] 1996, writ denied), a manufacturer sued one of its distributors for breach of the confidentiality provision in a settlement agreement. The facts showed that, after entering into the settlement, the distributor had telephone conversations with several other distributors, and shortly after the telephone calls, the other distributors filed suit against the manufacturer. The distributor argued the fact that he had called the other distributors was no evidence that he had disclosed the settlement during the telephone conversation. The court held that the timing of the telephone calls in relation to the settlement and the other distributors filing suit was sufficient to create the inference that the distributor had disclosed the settlement agreement during the telephone conversations with the other distributors.

78. In NRG's case, the circumstantial evidence to support the inference that Trichel disclosed NRG's concept to White and Bangert is even stronger than the evidence in *Felker*. White was desperate to find a solution, he did not believe Baker Oil Tools could come up with it on its own, he met with Trichel just a day after NRG had disclosed the concept to Trichel, and

¹¹⁴ Exhibit PX 33

¹¹⁵ Trichel, Page 20 lines 16 through 21.

just two working weeks later (the Christmas and New Year's holidays intervened), Bangert, in a seeming miraculous way, sketches the very same idea at a meeting. At the very least, the above evidence creates a fact issue concerning whether Trichel disclosed NRG's Technology to White and Bangert in December 1991.

(2) Bangert's Independent Development Story is Not Credible.

79. In the preceding section, Bangert's claimed invention of the Technology at the January 7, 1992 meeting is referred to as "miraculous." After reviewing Bangert's story of how he allegedly came up with the concept, the Court will see why that word is appropriate.

80. Prior to going to the meeting, Bangert had done no design work on multilateral completions, and he had not even thought about how to solve the problem.¹¹⁶ Prior to the meeting, he had not discussed the technical aspects of multilateral completion technology with anyone else, and he had not reviewed the prior work of anyone else at Baker Oil Tools with respect to multilateral technology.¹¹⁷ Bangert testified that he designed the entire eight step process at the meeting perhaps "in a flash" or "it may have been five minutes."¹¹⁸ Bangert did not keep any sketch of his concept that he prepared at the meeting, and his earliest documentation of the concept is the January 28, 1992 sketches attached to Bangert's EID.¹¹⁹ Finally, after allegedly inventing the concept at the meeting, Bangert does not recall having any further involvement with or doing any subsequent work on the development of the Technology.¹²⁰

81. As previously shown, the Baker Oil Tools Research Department had been working to find a way to seal the juncture for over six months and had not come up with a

¹¹⁶ Bangert, Page 33 lines 19 through 23.

¹¹⁷ Bangert, Page 33 line 24 through page 34 line 9.

¹¹⁸ Bangert, Page 35 lines 16 through 20.

¹¹⁹ Bangert, Page 37 lines 3 through 11.

¹²⁰ Bangert, Page 70 lines 7 through 19.

workable solution. Despite this fact, Baker Hughes argues that Bangert's story of having walked into a meeting, with no prior work or even thought on the problem, and inventing the full eight step process in a flash or five minutes is so compelling that reasonable minds could not differ concerning whether to believe Bangert's story of independent development. Bangert's story is not credible, it is inherently incredible, and it should be left to a jury to decide whether it should be accepted.

82. The expert affidavits of Professor Michael J. Economides and Charles R. "Rick" Stone controvert the Bangert testimony. Professor Economides is the leading expert on the subject of multilateral wells and has published a large body of work on the subject. Professor Economides' qualifications to render an opinion on the credibility of Bangert's story are detailed in his affidavit, and they include his experience as the Principal Investigator of graduate student research projects, the Chief Scientist and Head of the Scientific Advisory Panel of the Global Petroleum Research Institute, and his experience as Senior Staff Engineer for Dowell Schlumberger. Professor Economides has overseen the development of innumerable oil well concepts, and he is uniquely qualified to render an opinion concerning the credibility of Bangert's story.

83. Professor Economides also explains in his affidavit that one of his duties as a Principal Investigator of graduate student research projects is to determine whether the graduate students' thesis is based on original work. The universally accepted criteria for making such a determination include the following criteria: (a) Whether the author has performed previous work in the area that is of similar maturity level and scope, including documentation of the prior work, (b) whether there is an inordinate similarity between the work and the work of another that cannot be explained by the general thrust of the subject or reasonable probability, and (c)

whether there are tell-tale signs, especially with regards to minute details and secondary issues, which taken as a whole, simply cannot be attributed to chance. Professor Economides bases his opinion on these accepted criteria.

84. Professor Economides explains in his affidavit that based on the complete lack of contemporaneous documentation, the complete lack of prior work or even thought about the problem, and the claim to have invented in about five minutes the full and detailed eight step process shown in the EID, Bangert's story is not credible. Furthermore, Professor Economides in his affidavit compares the NRG disclosures with Bangert's EID and, based on the similarities, concludes that Bangert must have used the NRG disclosure to prepare his EID.

85. In the Stone Affidavit, Mr. Charles R. "Rick" Stone details his extensive experience as a mechanical engineer in the oil and gas business. Mr. Stone also describes the well accepted engineering design process and compares Bangert's claimed design process with the accepted norm. Based on that comparison, Stone concludes that it is unlikely that Bangert could have independently developed the NRG Technology as he claims in his deposition, and it is unlikely he could have prepared the drawings in his employee invention disclosure form without having been exposed to the NRG Technology.

86. The Economides Affidavit and the Stone Affidavit controvert Bangert's testimony that he independently developed the Technology. For this reason, Defendants' summary judgment should be denied.

D. Even if Baker Hughes Independently Developed the Technology, it is not Entitled to Summary Judgment on all of NRG's Claims.

87. Even assuming only for the purpose of argument that Baker Hughes independently developed the Technology, it would still not be entitled to summary judgment on NRG's claims for breach of contract, fraud, breach of fiduciary duty, and breach of the duty of

good faith and fair dealing. The basis for these claims is that Baker Hughes represented to NRG throughout 1992 that it did not have the Technology nor did it know anyone who did. But for Baker Hughes' misrepresentations, NRG would have filed its patent application on the Technology prior to the date that Baker Hughes filed its patent application, and NRG would have presented the NRG Technology to other service companies in 1992. Had NRG filed its patent application first, its Technology would have been much more valuable to NRG.

(1) Baker Hughes Told NRG that it did not have the Technology

88. In 1992, NRG met with Baker Hughes on January 13, January 24, January 30, April 27, July 30, and September 3.¹²¹ At each of the meetings, NRG asked Baker Hughes whether they knew of anyone, including Baker Hughes, who was working on the same technology that NRG had disclosed to them, and in each case, Baker Hughes told NRG that it was not independently working on the same technology.¹²² Even Baker Hughes' own witnesses testified that they never told NRG that Baker Hughes had independently developed the Technology.¹²³ Baker Hughes also concealed from NRG the fact that it was going to file a patent application on the Technology.¹²⁴ Indeed, Baker Hughes in-house patent counsel, Alan Atkinson, who met with NRG, testified that he did not tell NRG about the patent application because "it was none of [their] business."¹²⁵ A more flagrant violation of fiduciary duty and duty of good faith and fair dealing would be difficult to find.

89. The documentation also shows that Baker Hughes never told NRG that it had independently developed the Technology. On February 10, 1992, Atkinson received a letter

¹²¹ See Graham Affidavit.

¹²² See Graham Affidavit; Scales, Page 221 lines 1 through 22; Scales, Page 297 lines 2 through 25; Scales, Page 346 lines 18 through 24.

¹²³ See Newton, Page 100 lines 7 through 20; Ogden, Page 29 lines 21 through 29; Nazzal, Page 71 lines 12 through 25; Nazzal, Page 158 line 20 through page 159 line 4.

¹²⁴ Graham Affidavit; Newton, Page 100 lines 7 through 20; Ogden, Page 29 lines 21 through 29; Nazzal, Page 71 lines 12 through 25; Nazzal, Page 158 line 20 through page 159 line 4.

from NRG (in response to his request) which submitted additional information for Baker Hughes to review in its evaluation of whether it wanted to jointly develop the NRG Technology.¹²⁶ The letter clearly shows that on February 10, 1992 NRG believed that Baker Hughes were still evaluating whether to jointly develop the NRG Technology and apply for joint patents. Atkinson testified that he never told NRG in response to the letter that Baker Hughes already had the Technology.¹²⁷ On February 14, 1992, NRG sent Atkinson a summary of a patent search that NRG had performed at the request of Atkinson.¹²⁸ Atkinson admitted having received the summary, but he "ignored it and threw it away."¹²⁹

90. At the same time that Atkinson was ignoring NRG's correspondence, he was helping to put together Baker Hughes' patent application.¹³⁰ In fact, the evidence shows that Baker Hughes was in a rush to get the patent application filed.¹³¹ It is clear that Baker Hughes made a concerted effort to string NRG along to keep NRG from filing its patent application before Baker Hughes filed its application. Such conduct by Baker Hughes constitutes a breach of the confidentiality agreements, fraud, breach of fiduciary duty, and breach of the duty of good faith and fair dealing.

(2) Breach of Contract.

91. The stated consideration under the confidentiality agreements was "the disclosure to each party of the confidential and proprietary information of the other party." Further, the confidentiality agreements provide that independently developed technology, "as evidenced by the Receiving Party's written records," was exempt from the confidentiality provisions. Both of

¹²⁵ Atkinson, Page 105 lines 10 through 14.

¹²⁶ Atkinson, Page 75 lines 17 through 23.

¹²⁷ Atkinson, Page 78 line 4 through page 80 line 2.

¹²⁸ Graham Affidavit.

¹²⁹ Atkinson, Page 112 line 15 through page 113 line 4.

¹³⁰ Atkinson, Page 80 line 9-Page 87 line 3; Page 88 line 13-Page 97 line 20.

¹³¹ Faltin, Page 20 line 9-Page 23 line 14, Page 36 line 1-Page 37 line 6.

the above provisions create a duty on the part of Baker Hughes to tell NRG if Baker Hughes has independently developed the same technology. At the very least, such provisions require that Baker Hughes refrain from misrepresenting to NRG that they have not independently developed the same technology. Either way, Baker Hughes has breached the Confidentiality Agreements. There is a fact issue concerning whether Baker Hughes' misrepresentation and/or failure to disclose concerning the alleged independent development constitutes a breach of the Confidentiality Agreements.

92. In the Amended Motion, Baker Hughes claims the Court may ignore the provision in the Confidentiality Agreements providing that the consideration for the agreement is the obligation of each party to disclose its confidential and proprietary information because it is merely a "prefatory clause." Baker Hughes' argument is contrary to the maxim that a court in construing a contract "must look at the entire writing and try to harmonize all provisions so that none are rendered meaningless." *Affiliated Capital Corp. v. Commercial Fed. Bank*, 834 S.W.2d 521, 526 (Tex. App.--Austin 1992, no writ) (citing *Universal C.I.T. Credit Corp. v. Daniel*, 150 Tex. 513, 243 S.W.2d 154, 158 (1951)). When the consideration provision is considered in connection with the provision in the agreements concerning proof of independent development through written records, it is apparent that the parties intended that the party receiving confidential information was under a duty to disclose to the other party that they had already independently developed the same technology.

93. NRG's interpretation of the Confidentiality Agreements is also in accord with the facts and circumstances surrounding the execution of the Confidentiality Agreements. Even when a contract is unambiguous, the language used by the parties should be interpreted in light of the facts and circumstances surrounding the execution of the agreement. *See Sun Oil Co. v. Madeley*, 626 S.W.2d 726, 731 (Tex. 1982); *see also Parten v. Cannon*, 829 S.W.2d 327, 330 (Tex. App.--Waco

1992, writ denied). As detailed above, one of the primary reasons that NRG approached Baker Hughes was so that it could find out whether Baker Hughes or any other service company had already developed the Technology. The Confidentiality Agreements specifically provide for how the parties deal with the situation where a party has independently developed the technology disclosed by the other party. Those provisions would be meaningless if there was not also a duty to tell the other party of the claimed independent development. At the very least, the Confidentiality Agreements are ambiguous concerning whether they imposed a duty to disclose on Baker Hughes, thus precluding summary judgment.

(3) Fraud

94. Baker Hughes' seeks summary judgment on NRG's fraud claim by claiming that it did not make a false statement. NRG has amended its petition to assert the claim in the alternative that Baker Hughes also committed fraud when it misrepresented that it had not independently developed the same Technology that NRG disclosed to it. Even if Baker Hughes independently developed the Technology, there is still a fact issue concerning whether Baker Hughes committed fraud by telling NRG that it did not have the same Technology.

95. Baker Hughes claims in its Amended Motion that it is entitled to summary judgment on NRG's fraud claim because NRG did not rely to its detriment on Baker Hughes' misrepresentations. Baker Hughes claims there was no detriment to NRG because (a) Baker Hughes had already independently developed the technology, and (b) it would make no difference whether NRG's patent had been filed and issued before Baker Hughes' patents. As to Baker Hughes' first contention, as previously discussed, there is a fact issue concerning whether Baker Hughes independently developed the NRG Technology. As to Baker Hughes' second contention, one does not have to be a patent

lawyer to know the obvious that it is better to file and obtain a patent first rather than second. Baker Hughes' second contention is patently ridiculous.

96. As shown in the Bert Scales Affidavit, but for Baker Hughes' misrepresentations, NRG would have filed its patent application in January 1992. Further, had NRG filed and obtained its patent applications before Baker Hughes, NRG would have approached other service companies in 1992, and under the circumstances described, NRG could and would have obtained a much higher fee for the Technology than it was able to get in 1995. Baker Hughes' earlier filed patent has clouded NRG's patent to such an extent that it was worth just a fraction of what it would have been worth had Baker Hughes told the truth. There is no basis for granting Baker Hughes a summary judgment on NRG's fraud claim.

(4) Breach of Fiduciary Duty.

97. In NRG's response to Baker Hughes Fiduciary Motion, it sets forth in detail the evidence and authorities supporting the claim that Baker Hughes owed NRG a fiduciary duty. NRG relies upon and incorporates by reference such evidence and authorities to respond to Baker Hughes Independent Development Motion. Baker Hughes owed NRG a fiduciary duty as to the Technology.

98. A fiduciary duty imposes on a party the duty to act with the utmost good faith and the most scrupulous honesty, and a duty to act fairly and fully disclose all material information. *Murphy v. Seabridge, Ltd.*, 868 S.W.2d 929, 935 (Tex. App.—Houston [14th Dist.] 1994, writ denied); *NRC, Inc. v. Huddleston*, 886 S.W.2d 526, 530 (Tex. App.—Austin 1994, no writ). Baker Hughes misuse of the technological information given to it by NRG, its misrepresentations to NRG, or at the very least its failures to disclose, concerning its misuse of that information, and its

claim of independent development constitutes a breach of fiduciary duty. Even accepting only for the sake of argument Baker Hughes contention of independent development, there is still a fact issue as to NRG's claim for breach of fiduciary duty.

99. Without the benefit of any legal authority, Baker Hughes argues in its Amended Motion that the confidential and fiduciary relationship expressly created in *Hyde Corp. v. Huffines*, 158 Tex. 566, 314 S.W.2d 763 (1958), and applied in *Brown v. Fowler*, 316 S.W.2d 111 (Tex. Civ. App.—Fort Worth 1958, writ ref'd n.r.e.) and *Avera v. Clark Moulding*, 791 S.W.2d 144 (Tex. App.—Dallas 1990, no writ), unlike every other confidential and fiduciary relationship created under Texas law, does not include a duty of full disclosure. There are numerous cases that make the blanket statement that an affirmative duty to disclose arises when “a confidential or fiduciary duty” exists between the parties. See *City of Houston v. McDonald*, 946 S.W.2d 419, 421 n. 2 (Tex. App.—Houston [14th Dist.] 1997, n.w.h.); *Palm Harbor Homes, Inc. v. McCoy*, 944 S.W.2d 716, 722 (Tex. App.—Fort Worth 1997, n.w.h.); *Emerald Texas, Inc. v. Peel*, 920 S.W.2d 398, 403 (Tex. App.—Houston [1st Dist.] 1996, no writ); *Casa El Sol-Acapolco, S.A. v. Fontenot*, 919 S.W.2d 709, 718 (Tex. App.—Houston [14th Dist.] 1996, writ dismiss'd by agr.). *Huffines*, *Brown* and *Avera* each hold that a confidential or fiduciary relationship is created, and there is not one statement in any of the three cases to even suggest that the confidential and fiduciary relationship created does not include a duty of full disclosure. The duty of full disclosure is not specifically addressed in the three cases simply because, as a factual matter, there was no issue in any of the cases concerning disclosure. Baker Hughes' argument is contrary to every reported Texas case and should be rejected by this Court.

(5) Good Faith and Fair Dealing.

100. In *Crim Truck & Tractor Co. v. Navistar Int'l Corp.*, 823 S.W.2d 591, 595 (Tex. 1992), the Texas Supreme Court held that "a fiduciary duty encompasses at the very minimum a duty of good faith and fair dealing." Baker Hughes' misrepresentations to NRG, or alternatively its failure to disclose, concerning Baker Hughes claimed independent development constitutes a breach of the duty of good faith and fair dealing.

D. Conclusion on Independent Development Motion

101. As shown above, Baker Hughes has not met its burden of conclusively establishing that it independently developed the Technology, and NRG has submitted controverting evidence showing that there are fact issues concerning Baker Hughes' independent development claim. In fact, the evidence developed from the depositions of Baker Hughes' own witnesses shows numerous contradictions between them on issues of material fact, such as whether there actually was a "brainstorming" meeting at Baker Hughes on January 7, 1992, whether Bangert saw or was told about NRG's technology prior to the meeting, whether Bangert actually announced an invention at the meeting, whether NRG was ever informed of Bangert's alleged invention, whether misrepresentations were made to NRG throughout most of 1992 and even in 1995 about whether Baker Hughes had applied for a patent on the technology, and other issues. Alternatively, even if Baker Hughes has established that it independently developed the Technology, which NRG steadfastly denies, Baker Hughes is not entitled to summary judgment on NRG's claims for breach of contract, fraud, breach of fiduciary duty, and breach of the duty of good faith and fair dealing.

II. RESPONSE TO FIDUCIARY DUTY MOTION

A. Introduction.

102. Baker Hughes claims that it is entitled to summary judgment as to NRG's claims for breach of fiduciary duty and breach of the duty of good faith and fair dealing because it has conclusively established the following facts:

- (a) NRG liked Baker Hughes' form confidentiality agreement and used it with other people;
- (b) Prior to approaching Baker Hughes with its Technology, there was nothing special about NRG's relationship with Baker Hughes; and
- (c) Prior to approaching Baker Hughes with its Technology, NRG's relationship with Baker Hughes was no different than its relationship with any other service company, i.e. NRG purchased goods and services from them.

(Defendants' Fiduciary Duty Motion, page 2-3). The above facts have absolutely no relevance to NRG's breach of fiduciary duty and good faith and fair dealing claims. Further, not one of the cases cited in Baker Hughes' Fiduciary Duty Motion even involved disclosure of confidential information.

103. As discussed below, the facts giving rise to the fiduciary duty that Baker Hughes owed NRG arose from the circumstances under which NRG disclosed its confidential Technology to Baker Hughes. Baker Hughes does not even mention those circumstances in its motion, nor does it cite to the court the controlling Texas authorities holding that, under such circumstances, the party receiving the confidential information owes a fiduciary duty to the disclosing party.

B. NRG Disclosed the Technology to Defendants in Confidence so They Could Determine Whether to Jointly Develop the Technology With NRG.

104. On December 5, 1991, Keith Trichel of Eastman met with Stephen Graham of NRG, and according to Trichel, Graham disclosed enough of NRG's Technology for Trichel to

understand it.¹³² Trichel testified that Graham told him that NRG was interested in Baker Hughes working with NRG to develop the Technology and to become co-applicants with NRG on a patent of the Technology.¹³³ Trichel also testified that Graham told him, and that he understood, that the information that he was disclosing to Trichel was to be kept in confidence.¹³⁴ On the same day that Trichel met with Graham, he prepared a memorandum to Roger Fincher summarizing the meeting.¹³⁵ Trichel summarized Graham's position as follows:

He has asked if Eastman Christensen is interested in pursuing a patent on the methodology as a co applicant in conjunction with his company. He has asked us because he believes that our parent company Baker Hughes has the infrastructure, patent attorneys, and connections to make it happen. . . . He has asked Eastman Christensen to sign a confidentiality agreement about the process (Mike Watson has a copy of this document) whether or not we decide to pursue the above course of action.

Both Trichel's testimony and his memorandum clearly show that Baker Hughes understood that NRG was disclosing the Technology in confidence for the purpose of allowing Baker Hughes to determine whether they would enter into an agreement with NRG to jointly develop the Technology.

105. Grahame Newton's Memorandum of January 15, 1992 to Rainer Juergens also shows that Baker Hughes clearly understood that NRG's disclosure was confidential and for the purpose of allowing Baker Hughes to appraise the Technology.¹³⁶ Newton stated in the memorandum that Graham had suggested several alternatives:

- (1) Attempt to patent the process in Baker Hughes's name with Mr. Graham as inventor.
- (2) An agreement between NRG/BHI [Baker Hughes] to develop and the market the technique with BHI supplying service to other operators under license from NRG.

¹³² Trichel, Page 31 line 9 through page 32 line 15.

¹³³ Trichel, Page 47 lines 13 through 25; page 59 lines 12 through 18.

¹³⁴ Trichel, Page 53 lines 7 through 25.

¹³⁵ Exhibit PX37, Trichel, Page 41 line 21 through page 42 line 9.

¹³⁶ Exhibit PX167, Newton, Page 95 line 21 through page 98 line 25.

(3) A lump sum purchase of Mr. Graham' intellectual property.

The evidence shows that Baker Hughes knew that that NRG's disclosure was in confidence and made for the purpose of allowing Baker Hughes to evaluate the Technology.

C. Texas Law Imposes a Fiduciary Duty on a Party Receiving Confidential Information for the Purpose of Evaluating Whether to Enter a Business Deal Related to the Information.

106. Informal relationships may give rise to a fiduciary duty, and "[s]uch informal fiduciary relationships have also been termed 'confidential relationships', and may arise 'where one person trusts in and relies upon another, whether the relation is a moral, social, domestic or merely personal one.'" *Fitz-Gerald v. Hull*, 150 Tex. 39, 237 S.W.2d 256, 261 (1951); *Crim Truck & Tractor Co. v. Navistar Int'l Transp. Corp.*, 823 S.W.2d 591, 595 (Tex. 1992). Furthermore, said the court in *Crim*, the law recognizes the existence of confidential relationships in those cases "in which influence has been acquired and abused, in which confidence has been reposed and betrayed." *Crim*, 823 S.W.2d at 595 (citing *Texas Bank & Trust Company v. Moore*, 595 S.W.2d 502 507 (Tex. 1980)). One of the circumstances which give rise to a confidential relationship involves the disclosure of trade secrets under circumstances such as are found in NRG's case.

107. The seminal Texas case on the duty created in connection with the disclosure of trade secrets is *Hyde Corp. v. Huffines*, 158 Tex. 566, 314 S.W.2d 763 (1958). In *Huffines*, the plaintiff had invented a machine to compress garbage. The defendant manufactured garbage trucks. The plaintiff licensed the technology to the defendant in exchange for a royalty on each machine sold. Two years after entering into the licensing agreement, the defendant repudiated it and kept making and selling the machines without paying the plaintiff a royalty. The plaintiff filed suit against the defendant. While the case was pending, the plaintiff received a patent on

the machine. Based on a jury verdict favorable to the plaintiff, the trial court awarded damages to the plaintiff and issued an injunction prohibiting the defendant from manufacturing or selling the machine.

108. On appeal, the defendant argued that it should not be held liable because the licensing agreement did not expressly preclude it from making use of information disclosed by the plaintiff in the negotiations for, or as a result of, the licensing agreement. The Texas Supreme Court agreed that the agreement did not so provide, but it held that the defendant nevertheless had entered into a confidential relationship with the plaintiff when it obtained the confidential information through the negotiations for the licensing agreement. The court adopted and quoted Restatement of Torts § 757, which provides in relevant part:

One who discloses or uses another's trade secrets, without a privilege to do so, is liable to the other if . . . (b) his disclosure or use constitutes a breach of confidence reposed in him by the other in disclosing the secret to him.

Id. at 769. The court also adopted and quoted the comment to clause (b) of § 757, which provides:

A breach of confidence under the rule stated in this Clause may also be a breach of contract which subjects the actor to liability under the rules stated in the Restatement of Contracts. But whether or not there is a breach of contract, the rule stated in this Section subjects the actor to liability if his disclosure of another's trade secret is a breach of the confidence reposed in him by the other in disclosing the secret to him. The chief examples of a confidential relationship under this rule is the relationship of principal and agent. . . . Such is also the relationship between partners or other joint adventurers. But this confidence may exist in other situations. For example, A has a trade secret which he wishes to sell with or without his business. B is a prospective purchaser. In the course of negotiations, A discloses the secret to B solely for the purpose of enabling him to appraise its value. Or, A requests a loan from B, a banker, for the purpose of aiding the manufacture of a product by A's secret process. In order to assure B about the soundness of the loan, A discloses the secret to him in confidence. In both cases B is under a duty not to disclose the secret or use it adversely to A.

Id. at 769-70 (emphasis added). *Huffines* states the accepted law that when a party receives confidential information for the purpose of evaluating whether to enter a business deal related to the information, the receiving party enters into a confidential relationship with the disclosing party. Further, in accordance with the holding in *Crim Truck*, a party in a confidential relationship owes the other party a fiduciary duty.

109. The Texas Courts of Appeal have consistently followed *Huffines* in holding that, under circumstances such as in NRG's case, a fiduciary duty is created. In *Brown v. Fowler*, 316 S.W.2d 111 (Tex. Civ. App.—Fort Worth 1958, writ ref'd n.r.e.), the plaintiff disclosed his process for manufacturing a pedal actuated merry-go-round to the defendant during the negotiations for a licensing agreement. The parties entered into a licensing agreement, but the defendant eventually stopped paying the plaintiff under the agreement and kept making the machine. Just as in *Huffines*, the plaintiff had obtained a patent on the technology after disclosing it to the defendant. The plaintiff sued the defendant for breach of contract and "disregard of confidential relationships." *Id.* at 114. The trial court entered a judgment for the plaintiff for money damages and an injunction enjoining the defendant from using the technology in the future. The court of appeals held that because the plaintiff disclosed its secret to the defendant and the defendant was interested in manufacturing and selling the device, the defendant held the secret in confidence for the plaintiff. Quoting from a United States Supreme Court case, *S. I. DuPont de Nemours Powder Co. v. Masland*, and 44 U.S. 100, 6 L. Ed 1016, the court stated:

Whether the plaintiffs have any valuable secret or not the defendant knows the facts, whatever they are, through a special confidence he accepted. The property may be denied, but the confidence cannot be. . . . the defendant stood in confidential relations with the plaintiffs, or one of them. These have given place to hostility, and the first thing to be made sure of is that the defendant shall not fraudulently abuse the trust reposed in him. It is the usual incident of confidential

relations. If there is any disadvantage in the fact that he knew the plaintiffs' secrets, he must take the burden with the good.

Id. at 115. Just as in the *Brown* case, Baker Hughes accepted NRG's technology in confidence, thus they entered into a confidential relationship with NRG. These cases all have factual situations similar to this case.

110. The case with facts that are virtually identical to NRG's case, however, is *Avera v. Clark Moulding*, 791 S.W.2d 144 (Tex. App.—Dallas 1990, no writ). In *Avera*, the plaintiffs conceived of a new process to produce a marble faux appearance as a finish on a picture frame moulding. Just as NRG did with Baker Hughes, the plaintiffs disclosed their process to the defendant, a much larger manufacturer of picture frames, in an effort to get the defendant to enter into a business arrangement with them. Also as in NRG's case, the plaintiffs proposed to the defendant that its larger capacity for manufacturing, marketing, and capital coupled with the plaintiffs' new process would provide both with a profitable business opportunity. The defendant declined to enter into an agreement with the plaintiffs. However, shortly thereafter, the defendant purchased equipment and began making mouldings using the plaintiffs' process. Asserting the same claim as NRG has done in this case, the plaintiffs filed suit for misappropriation of trade secret and breach of fiduciary duty. Just as Baker Hughes are now asking this Court to do in this case, the defendant in *Avera* convinced the trial court to grant it a summary judgment on its breach of fiduciary duty claim. The court of appeals reversed, holding:

We conclude there exists a genuine issue of fact as to the question of whether [the plaintiff] had a trade secret as that is defined, and if so, whether it was revealed in such a confidential manner that it constitutes a breach of fiduciary duty to use it without permission.

Id. at 146. The circumstances under which NRG disclosed the Technology to Baker Hughes is, in all material respects, identical to the circumstances described in *Avera*. Just as in *Avera*, it

would be reversible error were this court to grant Baker Hughes' motion for summary judgment on NRG's claim for breach of fiduciary duty.

111. Baker Hughes' cases in no way support their argument. Not one of Baker Hughes' cases even involves the relationship between a party disclosing confidential information and the party receiving it. See *Crim Truck & Tractor Co. v. Navistar Int'l Transp. Corp.*, 823 S.W.2d 591, 595 (Tex. 1992) (franchisor/franchisee relationship); *Lovell v. Western Nat'l Life Ins. Co.*, 754 S.W.2d 298 (Tex. App.—Amarillo 1988, writ denied) (relationship between a mortgagor and a mortgagee); *Consolidated Bearing & Supply Co. v. First Nat'l Bank*, 720 S.W.2d 647, 649 (Tex. App.—Amarillo 1986, no writ) (relationship between a bank and one of its customers); *Central Savings & Loan Assoc. v. Stemmons Northwest Bank*, 848 S.W.2d 232, 243 (Tex. App.—Dallas 1992, no writ) (relationship between a beneficiary and the issuer of a letter of credit); *Rutherford v. Exxon Co., U.S.A.*, 855 F.2d 1141 (5th Cir. 1988) (relationship between and oil and gas lessor and lessee); *Stephantz v. Laird*, 846 S.W.2d 895 (Tex. App.—Houston [1st Dist.] 1993, writ denied) (relationship between a corporate employee and the shareholders of the corporation). Baker Hughes' cases have no application to the facts of NRG's case, and they certainly do not support Baker Hughes' motion for summary judgment on NRG's breach of fiduciary duty claim.

112. Under the applicable Texas authorities, when Baker Hughes decided to review NRG's disclosures to determine whether they wanted to enter into a business arrangement with NRG, Baker Hughes assumed the responsibility of acting as a fiduciary in connection with NRG's Technology. Baker Hughes' motion for summary judgment as to NRG's breach of fiduciary duty claim should be denied.

D. Baker Hughes Owed NRG a Duty of Good Faith and Fair Dealing.

113. As shown above, at the least there is a fact issue concerning whether Baker Hughes owed NRG a fiduciary duty. "A fiduciary duty encompasses at the very minimum a duty of good faith and fair dealing." *Crim Truck & Tractor Co. v. Navistar Int'l Transp. Corp.*, 823 S.W.2d 591, 595 (Tex. 1992). If Baker Hughes owed NRG a fiduciary duty, as a matter of law, they also owed NRG the duty of good faith and fair dealing. Baker Hughes motion for summary judgment as to NRG's claim for breach of the duty of good faith and fair dealing should be denied.

E. Conclusion on Fiduciary Duty Motion.

114. As demonstrated herein, there are fact issues concerning whether NRG's disclosure of its Technology to Baker Hughes was under such circumstances that Baker Hughes owed NRG a fiduciary duty in connection with the Technology. There is also a fact question concerning NRG's claim for breach of the duty of good faith and fair dealing. Accordingly, Baker Hughes' Fiduciary Duty Motion should be denied.

III. RESPONSE TO THE LIMITATIONS MOTION.

A. Introduction.

115. Baker Hughes claim that they are entitled to summary judgment on NRG's claims for breach of fiduciary duty, misappropriation of trade secrets, conspiracy, unjust enrichment and breach of the duty of good faith and fair dealing on the grounds that the claims are barred by limitations. The only summary judgment evidence Baker Hughes submitted with their motion is certain domestic and international patents and related testimony. Baker Hughes' only argument is that the patents provided NRG with constructive notice of its claims more than two years before suit was filed. (The only actual notice received by NRG was in March, 1995, less than

two years before this suit was filed. See the affidavits of Stephen Graham and Roger Scales.) The Court should reject Baker Hughes' argument as a matter of law because, as a fiduciary to NRG, Baker Hughes are not entitled to rely on the constructive notice doctrine. Further, even if Baker Hughes could rely on the constructive notice doctrine, they have failed to submit evidence showing that NRG in fact had constructive notice of its claim more than two years before filing suit.

B. Baker Hughes Fraudulently Concealed NRG's Claim.

116. As discussed in the response to Baker Hughes Fiduciary Duty Motion, Baker Hughes owed NRG a fiduciary Duty. A fiduciary duty imposes on a party the duty to act with the utmost good faith and the most scrupulous honesty, and a duty to act fairly and fully disclose all material information. *Murphy v. Seabridge, Ltd.*, 868 S.W.2d 929, 935 (Tex. App.—Houston [14th Dist.] 1994, writ denied); *NRC, Inc. v. Huddleston*, 886 S.W.2d 526, 530 (Tex. App.—Austin 1994, no writ). Fraudulent concealment arises when the defendant, who is under a duty of disclosure, fraudulently conceals the existence of a cause of action from the party to whom it belongs. *Borderlon v. Peck*, 661 S.W.2d 907, 908 (Tex. 1983). As a fiduciary, Baker Hughes clearly owed NRG a duty to disclose that they were using NRG's Technology.

117. As detailed above in both the facts section and in the response to the Independent Development Motion, Baker Hughes represented to NRG in every meeting from January through September, 1992 that they did not have the Technology, and Baker Hughes never disclosed to NRG that it had obtained patents on NRG's Technology. Baker Hughes misrepresentations continued when they met with NRG in 1995, and still failed to disclose that Baker Hughes had obtained a patent.¹³⁷ NRG did not discover that Baker Hughes had misappropriated NRG's Technology until March 22, 1995, when NRG learned from a third party that Baker Hughes had

obtained a patent on the Technology.¹³⁷ There is clearly a fact issue concerning whether Baker Hughes fraudulently concealed NRG's claims.

C. Baker Hughes' Constructive Notice Argument Should be Rejected.

(1) Fiduciaries Cannot Rely on Constructive Notice.

118. Baker Hughes' sole basis for summary judgment is the application of the constructive notice doctrine to information disclosed in their patents. The constructive notice doctrine provides that a party is deemed to have actual knowledge of matters disclosed in public records. *Little v. Smith*, 943 S.W.2d 414, 420-21 (Tex. 1997). The reasoning behind the application of the constructive notice doctrine to limitations is that a party is under a duty to exercise reasonable diligence to discover his claim, and diligence includes the examination of relevant public records. *See Id.*

119. However, in connection with limitations and fraudulent concealment, "a person to whom a fiduciary duty is owed is relieved of the responsibility of diligent inquiry into the fiduciary's conduct." *S.V. v. R.V.*, 933 S.W.2d 1, 8 (Tex. 1996). Because a person to whom a fiduciary duty is owed is relieved of the responsibility of diligent inquiry, a fiduciary may not rely on the doctrine of constructive notice of matters in public records. *See Courseview, Inc. v. Phillips Petroleum Co.*, 158 Tex. 397, 312 S.W.2d 197, 206 (1957); *Russell v. Campbell*, 725 S.W.2d 739, 748 (Tex. App.-Houston [14th Dist.] 1987, writ ref'd n.r.e.).

120. In *Russell*, a partner sued another partner for breach of fiduciary duty resulting from the defendant partner having purchased property in his own name rather than on behalf of the partnership. The defendant argued that the claim was barred by limitations because the plaintiff did not file suit within two years after the defendant had recorded the offending deed in

¹³⁷ Scales Affidavit; Graham Affidavit.

¹³⁸ Scales Affidavit; Graham Affidavit.

the property records. Relying on *Courseview*, the court held that the constructive notice doctrine did not bar the plaintiff's claim.

121. Even Baker Hughes' cases recognize that the constructive notice doctrine does not apply to a party to whom a fiduciary duty is owed. In *Wise v. Hubbard*, 769 F.2d 1, 4 (1st Cir. 1985), the court makes a point of stating that there was no type of fiduciary duty between the parties. In *Becton Dickinson and Co. v. Reese*, 668 P.2d 1254, 1257 n. 13 (Utah 1983), the court notes that there was no allegation of fraudulent concealment in the case. In both *Wise* and *Becton*, the implication is clear that, had there been evidence of a fiduciary duty or a fraudulent concealment, the courts would not have applied the constructive notice doctrine. Thus, Baker Hughes' out-of-state authorities in no way conflict with the applicable Texas law set forth in *Courseview* and *Campbell*.

122. Defendants base their entire Limitations Motion on the proposition that NRG had constructive notice of its claims because of Baker Hughes' patents. Defendants' Limitations motion should be denied because, as set forth above, Baker Hughes' owed NRG a fiduciary duty so the constructive notice doctrine does not apply, and even assuming it does, solely for the sake of argument, Baker Hughes has not shown that the domestic and international patents and patent applications relied upon by Baker Hughes were available to the public more than two years before NRG filed this suit.

(2) There was no Constructive Notice More Than two Years From When NRG Filed Suit.

123. It is axiomatic that constructive notice of information contained in public records only applies if the information is in fact available to the public. *See Little*, 943 S.W.2d at 420-21. Defendants' only evidence of when the Defendants' patents were available in the public records is the issuance date on the domestic patents and the publication date on the international patents.

However, as stated in the Kuffner Affidavit, the dates on the patents themselves are not the dates on which the patents are in fact available in the public records. Mr. Kuffner, an experienced patent lawyer, testifies that it is his practice to advise clients not to expect to obtain a copy of a "published" international patent application until 3-6 months after the expiration of 18 months from the priority date, and to wait 4-6 weeks after a patent is "issued" before expecting to see a copy of the full printed patent disclosure.¹³⁹ The earliest of the Baker Hughes' domestic patents was issued on May 17, 1994. Six weeks later would have been June 28, 1994, which was one week after NRG filed this suit. The international patents show a publication date of February 17, 1994. NRG filed suit on June 21, 1994, which was just four months after the date on the patents.

124. Baker Hughes has submitted no summary judgment evidence showing when the patents were actually available to the public. Therefore, even if the constructive notice doctrine applied, which it does not, there is still a fact issue concerning when the patents were actually available to the public. For the above reasons, Baker Hughes' Limitations Motion should be denied.

D. Conclusion on Limitations Motion.

125. Baker Hughes' Limitations Motion is based solely on the application of the constructive notice doctrine. Baker Hughes' Limitations Motion should be denied because there is a fact issue concerning whether the constructive notice doctrine applies, and even if it does apply, whether the information was in the public records more than two years before NRG filed suit.

¹³⁹ Kuffner Affidavit.

IV. Conclusion.

126. As shown above, there are numerous fact issues concerning the claims raised in Baker Hughes' Amended Motion for summary judgment. Accordingly, the Court should deny Defendants' Amended Motion and grant NRG such other relief to which it may be entitled.

Respectfully submitted,

BAYKO GIBSON CARNEGIE HAGAN
SCHOONMAKER & MEYER LLP

A handwritten signature in black ink, appearing to read 'Tom Bayko', is written over a horizontal line.

TOM BAYKO
TBA No. 01864500
MICHAEL W. FORD
TBA No. 00797952
MARTIN P. DETLOFF
TBA No. 05779000
Texas Commerce Tower, 50th Floor
Houston, Texas 77002-2900
Telephone: 713-223-0101
Telecopier: 713-223-0042

KURT S. MYERS
LAW OFFICES OF KURT S. MYERS
7634 Braesdale
Houston, TX 77071
Telephone: 713-774-7152
Telecopier: 713-774-7152

ATTORNEYS FOR PLAINTIFF
NATURAL RESERVES GROUP, INC

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document was served on all counsel of record on this 30th day of October, 1997 as follows:

VIA HAND DELIVERY

Glenn A. Ballard, Jr.
South Tower Pennzoil Place
711 Louisiana St., Suite 2900
Houston, Texas 77002-2900

VIA CERTIFIED MAIL, RRR

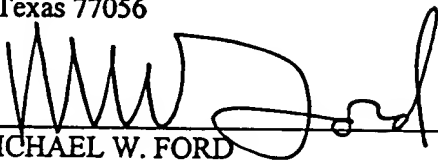
David G. Mangum
C. Kevin Speirs
201 South Main St., Suite 1800
P. O. Box 45898
Salt Lake City, Utah 84145-0898

VIA HAND DELIVERY

Jeffrey W. Tayon
Les Payne
Conley, Rose & Tayon
Texas Commerce Tower
600 Travis, Suite 1850
Houston, Texas 77002

VIA HAND DELIVERY

James B. Lewis
Matthew J. M. Prebeg
Glover, Anderson, Chandler & Uzick, L.L.P.
5599 San Felipe, Suite 1600
Houston, Texas 77056


MICHAEL W. FORD

NO. 96-31380

NATURAL RESERVES GROUP, INC. § IN THE DISTRICT COURT OF
Plaintiff, §
v. § HARRIS COUNTY, T E X A S
BAKER HUGHES, INCORPORATED, §
et al. §
Defendants. § 333rd JUDICIAL DISTRICT

AMENDED AFFIDAVIT OF PROFESSOR MICHAEL J. ECONOMIDES

STATE OF TEXAS §
COUNTY OF HARRIS §

1. My name is Michael J. Economides. I am over the age of 21 years and am fully competent to make this affidavit. I have never been convicted of a crime. I either have personal knowledge of the matters set forth herein, or the matters are of a type reasonably relied upon by experts in the field in forming opinions or inferences upon the subject.
2. I was asked to render an opinion concerning the credibility of the claim of Mr. Daniel Stephen Bangert (referred to below as "Bangert") that, on January 7, 1992, he independently conceived of the completion method set forth in his January 28, 1992 Employee Invention Disclosure (PX 11) (referred to below as the "Disclosure").

Opinion

3. It is my opinion that it is highly improbable that Bangert independently conceived the completion method set forth in Bangert's Disclosure (PX 11), and it is highly probable that Bangert prepared the Disclosure with the foreknowledge of information disclosed by Natural Reserves Group, Inc. (referred to below as "NRG") to Eastman Christensen, a subsidiary of Baker Hughes.

EXHIBIT

C

4. Neither Bangert's non-existent background work nor the complete absence of his involvement in subsequent developments could rationalize the suddenly substantive and unambiguous January 28, 1992 Disclosure.
5. The Bangert Disclosure would be tantamount to a performance of a student who in the first two of five tests completely failed, not by lack of trying but by demonstrable inability to grasp the concepts, then performs above all members of the class in the third test, showing competence beyond comprehension and, finally in the fourth and fifth tests reverts to the markedly failing levels of the first two tests. This is clearly not credible.
6. The nature of scientific and engineering inventions, while revelatory at times to the practitioners, does not happen via *deus ex machina* to the non-practitioners. Instead, "experience" also shows "that a process is iterative" and "further feedback and refinement of the needs" are what control the "process" (quote from the memorandum of Mr. Cameron White of Baker Oil Tools, May 10, 1991 (PX 32).
7. Bangert's disclosure, with attached drawings (PX 11), immediately lead to an opinion of plagiarism in comparison to successive and highly definitive disclosures by NRG, in particular those on January 12, 1992 (B000224 to B000230), January 22, 1992 (PX 5), January 22, 1992 (PX 65, PX 166, NRG0004735 - 4760) and January 25, 1992 (PX 132).
8. In reaching my opinion I have relied on universally accepted academic criteria and criteria of intellectual robustness. During my professional career both as a university professor, in examining the work of graduate students, such as theses and dissertations and, as a reviewer of peer publications and peer review Chairman for the Society of Petroleum Engineers, I have applied these criteria to gauge the originality and ownership of intellectual work:

These criteria include:

- a) Has the author not performed previous work in the area that is of similar maturity, level, and/or scope; has there been demonstrable documentation of prior work or art?
- b) Is there an inordinate similarity between this work and another that could not be explained by the general thrust of the subject or reasonable probability?
- c) Are there tell-tale signs, especially with regards to minute details and secondary issues, which taken as a whole, simply cannot be attributed to chance?

Bangert's work meets all these criteria and the specific details are outlined in paragraphs 38-47 of this report.

Information Reviewed

9. In arriving at my opinion, I reviewed and relied upon the information contained in the following documents:
- (a) May 10, 1991 Baker Oil Tools Market & Business Development Office Memo from Cameron White to Dave McStravick (PX 32);
 - (b) October 10, 1991 Office Memorandum from Dan Bangert to Dave McStravick (PX 33);
 - (c) November 20, 1991 Completion Concept by Ron Curington (PX 63);
 - (d) December 5, 1991 Eastman Christensen Memorandum from Keith Trichel (PX 37);
 - (e) December 12, 1991 Exhibit "A" to Confidential Nondisclosure Agreement (PX 164);
 - (f) January 3, 1992 Baker Oil Tools Market & Business Development Office Memo from Cameron White to Distribution (PX 40);
 - (g) January 4, 1992 Disclosure by NRG to Eastman Christensen (DX 1).
 - (h) January 10, 1992 Office Memo from Ron Curington to Listed (PX 43);
 - (i) January 12, 1992 NRG Summary of Confidential Disclosure (PX 5);
 - (j) January 15, 1992 Memorandum from Grahame Newton to Rainer Juergens (PX 167)
 - (k) January 22, 1992 NRG Advantages: Conventional vs. Vertical Wells (PX 65);
 - (l) January 22, 1992 NRG Summary of Confidential Disclosure (PX 166);
 - (m) January 22, 1992 NRG Summary of Confidential Disclosure (NRG0004735 - 4760);
 - (n) January 25, 1992 NRG Hopkins No. 40-H (PX 132);
 - (o) January 28, 1992 Baker Oil Tools Market & Business Development Memo from Cameron White to Doug Murray and Tom Tilton (PX 10);
 - (p) January 28, 1992 Employee Invention Disclosure by Daniel Stephen

Bangert (PX 11);

- (q) April 12, 1994 United States Patent No. 5,301,760, identifying Stephen A. Graham as Inventor (PX 155);
- (r) June 3, 1992 Multilateral Completion (PX 4);
- (s) June 21, 1994 United States Patent No. 5,322,127, identifying Robert J. McNair and Daniel S. Bangert as Inventors (PX 94);
- (t) March 7, 1997 Videotaped Deposition of Daniel Stephen Bangert;
- (u) Baker Oil Tools Dual Horizontal (PX 151);
- (v) Baker Oil tools Multi-Lateral Completion Concept (PX 34);
- (w) Baker Oil Tools Advertisement for Multi-Lateral Completion System (PX 85);
- (x) Baker Oil Tools Advertisement for Multiple Wellbore Completions (PX 86).

Qualifications to Render Opinion

- 10. Below, I summarize those elements of my background which were useful to me in forming my opinion. My complete resume is attached to this report.
- 11. I have served as endowed chair professor in two major universities, one overseas (Mining University of Leoben, Austria) and my current position as Samuel R. Noble Professor of Petroleum Engineering, Texas A&M University. In these roles I have served as the Principal Investigator of many research projects and supervised the research and technology development of over 50 M.S. and Ph.D. students.
- 12. I am the Chief Scientist and Head of the Scientific Advisory Panel of the Global Petroleum Research Institute. It is my function to screen research projects for technical robustness, track their progress, and critique and evaluate the results.
- 13. From 1987 to 1989 I served as Senior Staff Engineer, North America, for Dowell Schlumberger. One of my duties was to evaluate projects for the R&D group, shape their proposed deliverables and evaluate their results.
- 14. In the particular area of horizontal and multilateral wells, I have produced more professional publications than anybody in the field (about 30), I have written a

widely circulated textbook (*Horizontal Wells: Completions and Evaluation*, IHRDC, Boston, 1993), supervised several large research projects and consulted for more than 10 companies worldwide, expressly on the subject. In the last seven years I have taught more than 50 short courses on Horizontal/Multilateral wells in more than 20 countries, attended by over 1000 engineers.

Background of the Technology under Consideration

15. Starting in the West in the early 1980's, highly oriented drilling, often referred to in the vernacular as horizontal, emerged as a major activity in the petroleum industry. The advantage offered over the traditional vertical wells was then and remains today, the much larger well-to-reservoir exposure. Drilling technology advanced rapidly in the decade, aided by measurement while drilling (MWD) and logging while drilling (LWD) systems. Many new well configurations became possible and new capabilities of reservoir and well drainage architecture advanced considerably.
16. One new capability became then compelling: the draining of more than one geological unit from a single vertical well through the drilling of multiple drain holes, all connected back to the single vertical. This was the beginning of multilateral wells, with a variety of other descriptive names for specialized applications such as multibranching, multilevel, etc.
17. Crucial to the success of all horizontal wells and, especially, of multilateral wells is the "well completion". The term refers to the manner with which the drilled borehole is connected with a desirable reservoir and isolated from an undesirable one. Petroleum reservoirs are deposited in largely horizontal layers (strata), often separated by impermeable, non-reservoir rocks. A target reservoir is defined by its depth from the surface, its thickness and production characteristics, such as porosity, permeability and fluid pressure. Overlaying this target reservoir may be other reservoirs with different characteristics. The fluids in these reservoirs may be undesirable to commingle with those of the target. They may contain water or gas that would lower considerably the value of the produced fluid.
18. Heterogeneous pressure levels may cause crossflow from higher-pressure reservoirs to lower-pressure reservoirs, all connected by the same well. A specifically catastrophic crossflow would be the influx of hydrocarbons into a drinking water aquifer. Thus, zonal isolation is an essential element in well completions and this has been accomplished through the casing, cementing and subsequent selective perforating of petroleum wells. The problem has been particularly acute in horizontal wells. First, in drilling the horizontal section, a borehole with an angle buildup from the starting point in the vertical well to the horizontal may traverse several strata which should be isolated. Second, multiple drain holes from different formations connected to the vertical well may lead to

flow from one drain hole to another. Ability to isolate these drain holes from each other is, then, also very important.

19. Central to this issue is the connectivity between these drain holes and the vertical, the manner with which a hole ("window") is drilled on the vertical, how a pipe is extended into the horizontal and how it is cemented. The seal of this juncture and its integrity has been considered by almost all workers in the field as the key technical issues and the limits of the success of a horizontal and multilateral well.
20. This was the subject of the NRG disclosures to Baker Hughes, the documented activity in the Baker Oil Tools from May 10, 1991 to the Bangert Invention Disclosure of January 28, 1992 and U.S. Patents 5,301,760 (Graham: COMPLETING HORIZONTAL DRAIN HOLES FROM A VERTICAL issued April 17, 1994) and 5,322,127 (McNair and Bangert: METHOD AND APPARATUS FOR SEALING THE JUNCTURE BETWEEN A VERTICAL WELL AND ONE OR MORE HORIZONTAL WELLS, issued June 21, 1994).

Critical Chronology of Events up to January 28, 1992

21. On May 10, 1991 Mr. Cameron White, Market and Business Development Manager for Baker Oil Tools wrote a Memorandum to Mr. Dave McStravick, Manager of Engineering Products, Baker Oil Tools, entitled "Multiple Lateral Horizontal Completions." In this memorandum, White asked McStravick's "help" to "get ... the ball rolling on multiple lateral horizontal completions." He added that he had "attached a copy of everything in ... multiple lateral file...." (PX 32).
22. In the same memorandum, White referred to "Agip... working with Eastman Christensen on a project... Phase 2 of the project involves multiple lateral completions...." (PX 32). White proceeded to define the customer needs as "we want to be able to do anything we can do in a single lateral. In addition, there will be an need to selectively shut-off any lateral.... Each lateral would have multiple zones..." (PX 32). He further added "I can also foresee some sort of joint development program with Eastman Christensen with the goal of providing an integrated drilling and completion system." (PX 32)
23. White then defined the process of solving the multiple lateral completions problem: "I feel that we need to generate some ideas and concepts... I realize that the requirements I have given are rather vague... My experience has shown that the process is iterative; that is, we show operators some concepts... and we get further feedback and refinement of the needs." (PX 32)
24. On October 10, 1991 Bangert wrote an office memo to David McStravick of Baker Hughes in which Bangert identified a "wish list" of potential research projects developed by the Houston Product Managers (PX 33). Multilateral completions and one other "long term" need were considered to be "the top

priority". Bangert's memo then describes the "Engineering Research Projects" beginning October, 1991. At the top of the list appears: "Multi-lateral completions-How to seal casing at vertical well junction and how to re-enter the different laterals when needed."

25. In my opinion the White and Bangert memoranda show an organization that understands the importance of the problem, understands the need of integration with Eastman Christensen, however, has no concrete solution to the multiple lateral completion problems and foresees a lengthy and iterative process towards solution.
26. As late as November 20, 1991 a drawing by Mr. Ron Curington, project engineer for Baker Oil Tools, and witnessed by McStravick, shows a concept that is rather primitive and clearly different from the NRG technology (PX 63).
27. Within 15 days, on Dec. 5, 1991 Mr. Keith Trichel, Western Hemisphere Horizontal Drilling of Eastman Christensen wrote a memorandum to Mr. Roger Fincher entitled, "NRG Project", motivated by the "second meeting... with Buddy Grahme (sic) of NRG." In this memorandum Trichel describes the project "as innovative, very risky... unique in nature." He then added that the technology is "applied in ways that have probably never been attempted before."
28. Trichel summarized the NRG/Buddy Grahame (sic) position as follows: "He has asked if Eastman Christensen is interested... because he believes that our parent company Baker Hughes has the infrastructure... to make it happen." (PX 37)
29. In my opinion the Trichel memorandum shows a clear interest on the NRG technology, it acknowledges it as unique and non-obvious and makes an unambiguous connection between the NRG intentions and Eastman Christensen as an integral part of Baker Hughes.
30. Less than a month later on Jan. 3, 1992 Mr. Cameron White issued a memorandum to eight Baker Oil Tools employees subject "Multiple Lateral Meeting" to be held on Jan. 7, 1992. "The purposes of this meeting are to inform you on what has been done, to generate new concepts for completing multiple lateral wells, and to discuss how we intend to proceed with the project... I want to get ideas from as many people as possible..." (PX 40)
31. According to NRG's Mr. Graham, on Jan. 4, 1992 he mailed a summary of confidential disclosure of the technology to Mr. Greg R. Price, Vice President Western Hemisphere, Eastman Christensen and requested the signing of a "Confidential Nondisclosure Agreement." (DX 1)
32. The White memorandum of Jan. 3, 1992 called for Jan. 7, 1992 apparently led to a "Brain-Storm Team" on the Multilateral Completion Project on Jan. 7, 1992."

However, in a memorandum by Mr. Ron Curington on Jan. 10, 1992 entitled "Multi-lateral Completion Project," reference is made to the first meeting of the Brain Storm Team having taken place on Jan. 9, 1992. (PX 43). Bangert is not shown to have attended the Jan. 9, 1992 meeting, and the memorandum makes no mention of a Jan. 7, 1992 meeting. Unlike the apparent Jan. 9, 1992 meeting, where notes were taken and the ideas were documented at the time of the meeting, I have seen no contemporaneous documentation of the claimed Jan. 7, 1992 meeting. It is not clear to me whether this meeting actually took place.

33. Thirteen ideas, nine of which with accompanying conceptual schematics, were presented in the Curington memorandum of Jan. 10, 1992 representing the "thoughts and ideas from the group." (PX 43). None of the ideas are shown to have been conceived by Bangert.
34. NRG continued with four successive, highly detailed and specific disclosures to Baker Hughes, Inc. on Jan. 12, 1992 (PX 5); on Jan. 22, 1992 (PX 65 and PX 166); and on Jan. 25, 1992 (PX 132).
35. In the meantime Mr. Grahame Newton of Eastman Christensen (Houston) wrote a memorandum to Mr. Rainer Juergens of Eastman Christensen (Celle, Germany) on Jan. 15, 1992, outlining NRG's Graham's "hope of gaining... consequently BHI's [Baker Hughes, Inc.'s] support to develop his idea" of a "possible short radius completion system." (PX 167)
36. Finally, on Jan. 28, 1992, Mr. Cameron White addressed a memorandum to Messrs. Doug Murray and Tom Tilton to document "two ideas... that we should probably document a little better." This was motivated after "reviewing Ron Curington's notes from the multilateral brainstorming session..." (PX 10) Again, Curington's memorandum of Jan. 10, 1992, refers to a Jan. 9, 1992 meeting at which Bangert was not in attendance. In his memo of Jan. 28, 1992, Mr. White directs Messrs. Murray and Tilton to draw a rough sketch of their idea, "date it with the day you conceived the idea (Jan. 7), and today's date, & sign it."
37. The following testimony from the Bangert deposition is Bangert's story of how he conceived of the idea:

Q: Okay. Prior to going to this meeting of January 7, 1992, what -- what design work or thought had you given, if any, to multilateral completion technology?

A: I don't recall of any.

Q: Okay. Had you ever -- strike that. Had you discussed the technical aspects of multilateral completion technology with anyone prior to the meeting?

A: I don't recall.

Q: You don't recall doing it?

A: I don't recall doing it.

Q: Okay. Had you reviewed the work of anyone else at Baker Hughes with respect to multilateral completion technology prior to the meeting?

A: No.

Q: Okay. So once again, turning to the meeting, at some point I understand you advanced your idea?

A: That's correct.

* * * *

Q: Okay. And what was your idea?

A: My idea was a means of creating an opening in a vertical or horizontal wellbore and installing a lateral conduit or liner in that wellbore, cementing -- cementing the junction up to provide a pressure barrier between the two in the event there's a -- there's a reservoir in that area of the junction that nonproductive --

Q: And --

A: --and a means of restoring access to the vertical section below.

Q: And how did you conceive of that idea?

A: The problem was -- was stated "How do you seal a junction in a horizontal wellbore or multiple wellbore," and using my knowledge that I'd gained in operations engineering I came up with a way of doing it using existing technologies.

Q: All right. And you thought of it in that meeting?

A: Yes, I did.

Q: And you hadn't been thinking about such technology prior to the meeting?

A: Not to solve that problem.

Q: Okay. So did it come to you in a flash, Mr. Bangert?

A: Perhaps, or it may have been five minutes; but in any case, I developed the idea during the meeting --

Q: All right.

A: -- and that's what is shown on the disclosure.

* * * *

Furthermore, Bangert cannot remember even the most elementary details about the meeting at which he claims to have conceived his invention:

Q. How many brainstorming sessions did you attend in January, 1992?

A. One.

Q. Do you have an independent recollection that the date was January 7?

A. No, I don't.

Q. It's based on your review of the materials that you --

A. Based on my Daytimer entry and the disclosure document.

Q. Okay. Who was at the meeting on January 7 that you recall?

A. I don't recall all of the attendees. I remember that Doug Murray was there, and I don't recall the specifics of other people.

Q. Doug Murray's the only one you can remember?

A. That's the only one I can recall at this time. You have to remember, it was six years ago.

* * * *

Q. But you don't remember them being present?

A. I'm certain they were, but I don't recall their -- their physical presence.

Q. How many people approximately do you recall at the meeting?

A. I would -- I would be guessing if I gave you a number.

* * * *

Q. And did you describe your concept to the other people at the meeting?

A. I would imagine I did, yes. I don't recall the specifics of that descriptive review of the idea.

Q. Well, do you recall what words you used to describe your concept?

A. No, I don't.

Q. Others have said that you did a sketch at that meeting to depict the concept. Do you remember doing such a sketch?

A. I have no recollection of getting up in front of the group and making a sketch on a whiteboard or a flip chart or anything of that nature.

Q. Do you have any recollection of, after the meeting was over, taking such a sketch with you and doing something with it?

A. No, I don't.

Q. Other than the sketches attached to your invention disclosure, employee invention disclosure form, do you have any other sketches of the concept from the January 7, meeting.

A. No, I don't.

Q. Do you know if any other people at the meeting made a sketch of your idea?

A. No, I don't.

Q. When did you first do a sketch of the idea you had at the January 7, 1992, meeting?

A. Well, you stated that I had sketched it there. I don't have a recollection of that, but obviously January the 7th was -- would have been the first sketch. It was documented for the invention agreement on the 28th, I believe.

Q. (By Mr. Ford) I didn't state you sketched it on that date, Mr. Bangert. Other witnesses have said you did that.

A. Oh, all right.

Q. But you still have no recollection of presenting a sketch at the meeting of January 7, 1992?

A. I do not.

Q. Okay. So the question is, when did you first do a sketch of your concept? ...

A. I don't remember.

Q. What do you recall about what you told people at Baker Oil Tools after January 7 about the fact you had conceived of an idea at the brainstorming meeting?

A. I have no recollection of any discussions with anyone--

Q. You don't recall --

A. -- after that meeting.

Q. -- telling anyone about it.

A. No, I don't.

* * * *

Q. Okay. After your attendance at the meeting you've told us about in January, 1992, what was your next involvement with respect to multilateral completion technology?

A. I don't remember.

* * * *

Q. All right. While you were still at Baker Hughes, what did you have in your invention file, if anything, with regard to your concept arising out of the January 7 meeting?

A. Nothing.

Based upon my experience and after reviewing the above information, including the complete lack of contemporaneous documentation to support it, it is my opinion that Mr. Bangert's story that, without any prior work or even thought about the problem, he walked into a meeting and invented the concept shown in the Disclosure is not credible.

**A Comparative Analysis Between the Bangert
Disclosure and the NRG Technology**

38. NRG: "This invention concerns drilling one or more horizontal drain holes... from one vertical cased hole" (lines 1 and 2, second paragraph, NRG 0004693). Bangert: Figure 1 (B000535).
39. NRG: "Subsequently to drilling a vertical wellbore and cementing casing in place, a whipstock packer... is set" (lines 4 and 5, second paragraph, NRG 0004693). Bangert: Figure 2 (B000535).
40. NRG: "This whipstock stinger and whipstock tool is run on a work string containing the starting mill assembly." (lines 9-11, second paragraph, NRG 0004693). Bangert: Figure 3 (B000535).
41. NRG: "After milling a window in the casing, a horizontal well is drilled in the target formation" (lines 12 and 13, second paragraph, NRG 0004693). Bangert: Figure 4 (B000535).
42. NRG: "The horizontal well curve is then cased and cemented using an inflatable external casing packer" (lines 13 and 14, second paragraph, NRG 0004693). Bangert: Figure 5, complete with ECP and Figure 6. (B000536)
43. NRG: "A 'burning shoe' and wash pipe assembly is then run to drill through the portion of the liner that is protruding in the vertical well" (lines 14-16, second paragraph, NRG 0004693). Bangert: Figure 8 (B000537).
44. The technology as presented in the Bangert Disclosure is entirely mature with all necessary parts well thought out and replete with details. Such level of completeness would require considerable and focused R&D or field work.
45. The Bangert hand-drawn figures are repeated almost verbatim in professionally drawn figures under the heading of Baker Oil Tools (B000621 to B000628) and

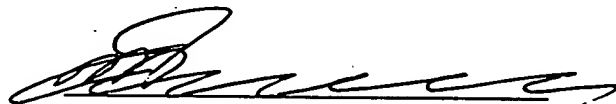
the essential elements appear again on B000853 to B000856, dated June 3, 1992, again, under the heading Baker Oil Tools.

46. Finally US Patent 5,322,127, McNair and Bangert, issued June 21, 1994 contains Figs. 5A to 5I which are essentially the same as the Bangert disclosure.
47. There is a completely overlapping similarity between Figs. 5A to 5I in US Patent 5,322,127 and US Patent 5,301,760, Graham, issued on Apr. 12, 1994.

Conclusion

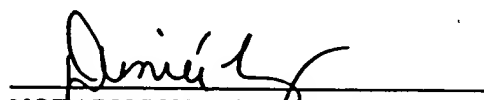
48. It is my opinion that the NRG technology and the Bangert Disclosure are not merely similar, they are essentially identical. Beyond the direct one-to-one analogies of all aspects of the technology described in the two disclosures, specific items, such as the use of inflatable ECP's could never be selected independently by chance.
49. The completeness of the Bangert disclosure is remarkable in itself and would have required advanced and demonstrable work. Thus, there is virtually no possibility that the Bangert Disclosure did not have detailed foreknowledge of the NRG Disclosure.
50. Considering that there is no previous documented work by Bangert in either outside or in-house publications on multilateral completions, the probability against independent development of his Disclosure is exceptionally high.
51. It is, thus, my opinion that the NRG technology was the basis of the Bangert Disclosure and that the NRG technology was explicitly known to Bangert before the drafting of the Jan. 28, 1992 Disclosure.

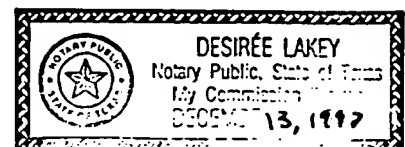
FURTHER AFFLIANT SAYETH NOT.



Dr. Michael J. Economides

SUBSCRIBED AND SWORN TO BEFORE ME on this 30 day of
October, 1997.


NOTARY PUBLIC IN AND FOR
THE STATE OF TEXAS



NO. 96-31380

NATURAL RESERVES GROUP, INC.

Plaintiff

Vs

BAKER HUGHES, INCORPORATED, et.al.

Defendants

§
§
§
§
§
§
§
§
§

IN THE DISTRICT COURT OF

HARRIS COUNTY, TEXAS

333rd JUDICIAL DISTRICT

AFFIDAVIT OF CHARLES R. "RICK" STONE

STATE OF TEXAS

COUNTY OF HARRIS

§
§
§

1. My name is Charles R. "Rick" Stone. I am over the age of 21 years and am fully competent to make this affidavit. I have never been convicted of a crime. I either have personal knowledge of the matters set forth herein, or the information relied upon is of a type reasonably relied upon by experts in the field in forming opinions or inferences upon the subject.
2. I was asked to render an opinion as to the probability that Mr. Daniel Stephen Bangert (referred to below as "Bangert"), on January 7, 1992, independently conceived of the multilateral completion method set forth in his January 28, 1992 Employee Invention Disclosure (PX-11, referred to below as "PX-11"), in the manner described in his deposition.

Information and Materials Reviewed

3. In arriving at my opinion, I reviewed and relied upon the information contained in the following documents and materials listed in the attached Exhibit "A".

Statement of Qualifications to Render Opinion

4. My opinion is based upon my education as a mechanical engineer, my registration as a professional engineer in the state of Texas, my years of experience in the design of oil field equipment and completion systems, research into universally accepted engineering design concepts and methodologies and the documents listed in Exhibit "A". My complete resume, attached as Exhibit "B", provides further support for my qualifications.

Abstract of Opinion

5. It is my opinion, to a reasonable degree of engineering certainty, that Bangert could not, or would not, leap instantaneously from a somewhat nebulous problem definition to the workable design shown in PX-11 without first going through at least a portion of the classical engineering design process. Moreover, it is highly unlikely that Bangert's PX-11 sketch, which is typical of the Preliminary Design Phase of the engineering design process, would be identical to NRG's more mature design, given that NRG's design was in the final, or Implementation, phase of the engineering design process. In conclusion, it is contrary to my experience, research and engineering training, as well as historical precedent, that Bangert could have independently conceived of the NRG Technology found in PX-11 with the level of effort, and within the time frame, claimed in his deposition. It is more plausible, believable and reasonable that Mr. Bangert was exposed to the NRG Technology and then sketched PX-11.

EXHIBIT

E

Supporting Narrative

6. After examining the documents related to this case (see Exhibit "B"), I have developed an opinion with regard to the probability of whether or not Mr. Bangert independently developed the NRG Technology in the manner testified to in his deposition. My opinion reflects a reasonable degree of engineering certainty and is based upon my education as a mechanical engineer, my experience in the design of oil field equipment and completion systems, and research into universally accepted engineering design concepts and methodologies.

In this opinion I will make and support the following assertions:

6.1 The NRG Technology Constitutes a Typical Engineering Design.

The NRG Technology constitutes a typical engineering design in that it provides an original solution to a technical problem. The concept of an engineering design must not be confused with special revelation or inspiration that can be accomplished in an instant. It is also important to understand that by definition, particularly in the technically advanced society in which we live, most so called "inventions" are actually engineering designs that combine existing technologies in a new and unique way to solve a problem. This is not a new concept in terms of creativity. For example Auguste Rodin (1840-1917) said, "I invent nothing. I rediscover"¹. In a similar category is the statement by Thomas Edison (1847-1931), "Keep on the lookout for novel ideas that others have used successfully. Your idea has to be original only in its adaptation to the problem you're working on"¹.

Engineering designs typically stem from well-defined problems and fall into one of two general design categories. The NRG Technology meets both these criteria:

- **Well Defined Problem:** The problem is well defined in that the objectives of the system were clearly defined before the design process began. The well-defined problem may be contrasted to the nebulous problem that could fall into the category of basic research. Basic research work typically requires a great deal of time just to reach the point where the problem can be stated clearly so that the engineering design process can begin. This also suggests that, before the design process can begin, the designer must have completed the basic research required to clearly define the problem.
- **System Design Category:** The categories of engineering designs include product design and system design. Product design is concerned with the design of a specific item that performs a distinct function. Products are typically mass-produced and are ideal for assembly line operations. In contrast, a system design is a solution that is composed of a number of individual items that can be used for other applications. Systems are typically not mass-produced. For example, an entire oil well is a complex system design.

In other words, the NRG Technology can be defined, based on the evidence provided, as a typical engineering design because:

- The NRG Technology stems from a clearly defined problem.
- The NRG Technology is typical of many engineering designs in that it is a combination of existing components in a different arrangement that solves a particular problem.
- The NRG Technology can be categorized as a system design; i.e. a solution composed of a number of individual items used for other applications.

¹ "Conceptual Design" by Ramsdale, R., Copyright 1997, Internet Document: www.geocities.com/CapeCanaveral/Lab

6.2 Engineering Design Requires a Process.

Before we delve into the design process, it is important that we define the relationship between engineering and design. Design, in an engineering context, may be defined as follows:

"The act of devising an original solution to a problem by a combination of principles, resources and products"²

Solutions may involve a combination of existing techniques, procedures or components in a different arrangement to provide a more efficient result or the development of an entirely new product. Based on this concept it may be said that all engineers, regardless of their discipline or specialization, are essentially designers of one type or another. In other words, engineering design is intrinsic to the discipline of engineering. This concept is supported by the literature, for example:

"Even though there is a wide range of activities within the broad definition of engineering, the engineer is basically a designer."²

It is important to note that engineering design is not the same as artistic design for aesthetic purposes. Artistic design is limited only by the creativity of the designer and the medium in which the artist works and may be played out in any number of ways. In contrast, engineering design is necessarily constrained:

"The engineer or designer must be creative within certain limits of physical and scientific laws which cannot be violated."²

Therefore, the concept of engineering design must not be confused with the romantic notion of the inspired inventor that suddenly conceives of a complex and unique device through divine revelation. Thomas Edison, whom Albert Einstein called "the greatest inventor of all time", made this statement about his own inventive genius; he called it:

"1 percent inspiration and 99 percent perspiration."³

In short, creative engineering design is a structured, disciplined process that is forced upon the designer by the complex realities of the natural world. In order for the engineer to create functional and useful designs, the engineer must apply considerable effort and follow a disciplined design process. Today, that process is taught as a part of all classical engineering disciplines:

"Engineering design is not an inspirational phenomenon that is experienced by only a few, but is the result of a systematic, disciplined approach to the needs of a problem"²

That is not to say that engineering design proceeds at a constant pace. An engineer may make a sudden leap in understanding of a particular problem and its solution. However, in my experience, leaps in engineering design do not occur without considerable mental effort prior to the breakthrough. They typically occur as part of the design process after the engineer has been immersed in the facts and worked the problem intensely for an extended period.

² "Engineering Design Graphics", 2nd Edition, by Earle, J., Copyright 1973, Addison-Wesley Pub. Co.

³ "The New York Public Library Book of Popular Americana" by Tad Tuleja, 01-01-1994. Copyright 1994, The Stonesong Press, Inc., and The New York Public Library.

The Engineering Design Process

The engineering design process, as engineers currently apply it, has been developed over many years and has been documented in various engineering texts^{4,5,6}. The basic steps in engineering design are:

- Problem Identification
- Preliminary Ideas
- Problem Refinement
- Analysis
- Decision
- Implementation

Problem Identification

The first step is to accurately identify the problem. This is required because it is necessary that the designer thoroughly understand the problem before a viable design can be completed. In this respect, field data and research of applicable technologies can provide valuable information to the designer.

Preliminary Ideas

During this phase the designer(s) accumulate as many ideas as possible. These are typically broad ideas that allow for unique solutions that could revolutionize present methods. Many rough sketches, brainstorming, problem analysis, and research of present designs characterize this phase. The creation of many sketches is typical during this phase as supported by the following:

"An engineer who is developing a design solution must make many sketches and drawings to develop his preliminary ideas before he can communicate with his associates"⁵

Problem Refinement

During refinement several of better preliminary ideas are selected for more detailed review and analysis. Rough sketches become engineering drawings that include specifications, dimensions, depths and procedures. The merits of the various refined designs are compared to select the best solution for a specific problem.

Analysis

It is during this phase of the design process where engineering and scientific principles are used most. The best design options for a particular problem are compared with respect to:

- Cost
- Strength of Materials and Equipment Ratings
- Function
- Market Appeal

⁴ "Standard Handbook of Machine Design", 2nd Edition by Shigley and Mischke, Copyright 1996, McGraw-Hill.

⁵ "Engineering Design Graphics", 2nd Edition, by Earle, J., Copyright 1973, Addison-Wesley Pub. Co., Page 36.

Decision

A decision must be made at some point to select the best design for a particular problem that will be:

- Refined further
- Built
- Tested
- Marketed to Customers

Implementation

Ultimately, the final design concept for a particular problem must be presented in a workable form. The final design must include detailed drawings and necessary procedures. Final deliverables must be sufficiently detailed so that the final product can be manufactured, sold and put into service.

6.3 The design process is iterative in nature.

Designers do not typically go directly from Problem Identification to Implementation, which is the final design phase. In most cases a design idea progresses, is evaluated, is found lacking, and then must be discarded or modified. This may require the designer to return to an earlier phase in the process. This is typically a very time consuming process, however it leads to more elegant and practical solutions. The iterative nature of engineering design is widely accepted in the engineering profession and is supported by various engineering texts. For example:

"Design is an iterative process in which we proceed through several steps, evaluate the results, and then return to an earlier phase of the procedure"⁶

6.4 Mr. Bangert could not have developed the NRG Technology contained in PX-11 with the level of effort, and within the time frame, testified to in his deposition.

Bangert's Employee Invention Disclosure dated January 28, 1992, identified as PX-11, is a hand-drawn sketch of a multi-step sealed multi-lateral completion process. The design shown addresses only one of the many potential problems that sealed multi-laterals are designed to solve, namely that of a non-mechanical seal that uses cement as the sealing material and allows for re-entry of the lateral and provides for a full opening vertical wellbore. It is important to note that, over the intervening years since the inception of NRG's unique design concept, NRG's design has become the core technology for the majority of the more sophisticated designs in use today. The essential elements, concepts and ideas illustrated in PX-11 (also the core of Baker's more sophisticated designs in use today) are virtually identical to those found in NRG's disclosure documents. The issue becomes what stage of the design process is represented by PX-11, and what level of effort would be necessary on the part of the designer to reach that stage.

Problem Identification Phase

Bangert testified in his deposition that he independently developed the NRG Technology in about five minutes or so during a brainstorming meeting (allegedly held on January 7, 1992). His deposition testimony reveals that prior to the alleged meeting of January 7, 1992 he had not made a detailed analysis of the problem to be solved, reviewed any specific field applications or made any effort to review existing technologies. Moreover, according to his testimony, Mr. Bangert only vaguely remembers the meeting at all. In a memorandum labeled PX-32, Mr. Cameron White of Baker-Hughes states that:

⁶ "Mechanical Engineering Design", 5th Edition, by Shigley and Mischke, Copyright 1996, McGraw-Hill.

"I realize that the requirements that I have given are rather vague, but it is difficult to pin down an operator on specific requirements for an idea that is so new and radical"

In contrast to this statement, the design sketched (PX-11) represents a very specific solution to a very specific problem. However, there is no indication that Bangert made an effort to clearly define the particular problem he was trying to solve. For example, I would expect to see at least a minimal problem definition such as: "The case where a non-mechanical seal that uses cement as the sealing material and allows for re-entry of the lateral and a provides a full opening vertical wellbore is sufficient or required". This design, although extremely useful, is in no way an answer to the universal problem of multi-lateral completions as there are many situations where this design would not be appropriate or necessary. This design, as shown in PX-11, was a unique solution to a portion of all the possible multi-lateral problems that existed. In this context, it is interesting to note that this design is unlike the other designs shown in Baker's patent (5,322,127) with respect to using a non-mechanical seal (cement) at the juncture. The other engineers on this project were apparently trying to solve a different problem; namely the case in which the junction of the vertical and lateral wellbores is accomplished via a mechanical seal, not through the use of cement. In my opinion, it is improbable that Bangert would randomly develop this particular solution without first going through the process of identifying the particular problem he was trying to solve. There is no evidence in the documents reviewed that he did so, and in fact his testimony indicates that he did not.

Preliminary Ideas Phase

The sketches shown are consistent with the "preliminary idea" stage of design but appear to have been influenced by a more complete design. Mr. Bangert's experience and education appear to be consistent with the skills required for creation of this design. However, in my experience, it is highly unlikely that even an experienced engineer such as Bangert could create a design as detailed as the one shown in the time frame indicated. This is particularly true if the designer is not currently involved in the design process and has not spent considerable time contemplating the problem and possible solutions. Although the NRG Technology is simpler than many of the other designs described in Baker's patent (5,322,127), it still requires eight or more steps to complete, numerous pieces of equipment, and requires a knowledge of the clearances and specifications of the tubulars and downhole tools involved.

However, if Bangert had been exposed to the information contained in NRG's design disclosure documentation, (e.g. through a casual review of the NRG materials given to the Defendant in the previous meetings with NRG, or a description of the NRG Technology), five minutes might be sufficient time to conceptualize or recall the design shown as PX-11. However, the process for generation of a new workable design typically lasts much longer than designing a final product from an already known technology. Even with exposure to the NRG disclosure documents, generating the actual sketches shown in PX-11 would probably require between thirty minutes and an hour. The idea that Bangert was influenced by information related to the NRG design is more plausible, believable and reasonable than the idea that Bangert created PX-11 without exerting the effort that would normally be required to create a design of this type.

Refinement Phase

It is unusual that Bangert's Preliminary design appears to be identical to NRG's completed design, which was very detailed, included a procedure and was ready for implementation in the field. Based on PX-11, there is no evidence that Bangert had moved beyond the preliminary idea phase into problem refinement, analysis, decision, or implementation. As of the original filing date of PX-11 (January 28, 1992), there is no evidence that any refinement of the design or considerations of potential problems with the design was made. Items of concern in this design that would normally be addressed in the refinement phase might include inadvertent sidetracking of the over-shot mill, build-up of metal at the milled casing window lip, etc. There is no evidence that there was time and effort put into considering potential problems with the design. In other words, it appears that Bangert skipped the refinement phase and claims to have developed a completely feasible design in the first try without any false starts, trial-drawings, brainstorming with colleagues or referring to equipment tables or reference books for specifications. This is not typical to the design process and runs contrary to my experience.

Analysis, Decision and Implementation Phase

It is obvious from PX-11 that Bangert did not enter the analysis phase, which typically requires dimensions, specifications and load and stress calculations to verify the practicality of the design. NRG's design, on the other hand, had reached the Implementation phase and could have been deployed in the field. Any improvements made by Baker would have been minor. The idea that Bangert's design, which was created in five minutes, would turn out to be identical to NRG's design, which had been through an iterative design process and required, according to Mr. Stephen Graham's deposition testimony, approximately 160 hours to create, is extremely unlikely.

Conclusions

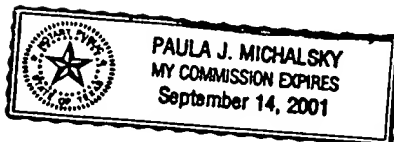
- The NRG Technology constitutes a Typical Engineering Design;
- Typical Engineering Design requires a disciplined, iterative process;
- The Design Process takes a considerable amount of time and mental effort;
- The design process is iterative in nature. It is contrary to my experience, research, education and reasonable expectations that Mr. Bangert could, or would, circumvent the Engineering Design Process and jump to the level of design shown in PX-11 without an iterative process;
- It is highly unlikely that Mr. Bangert could have independently conceived of the NRG Technology contained in PX-11 with the level of mental effort, and within the time frame, testified to in his deposition.
- It is more plausible, believable and reasonable that Bangert was exposed to the NRG Technology and then sketched PX-11.

FURTHER AFFIANT SAYETH NOT.

Charles R. Stone
Charles R. "Rick" Stone, PE

SUBSCRIBED AND SWORN TO BEFORE ME on this 30th day
of October, 1997.

NOTARY PUBLIC IN AND FOR
THE STATE OF TEXAS



Printed name of Notary: Paula J. Michalsky

Signature of Notary: Paula J. Michalsky

My commission expires: 9-14-01

“Exhibit A”

DOCUMENTS REVIEWED

DEPOSITION TRANSCRIPTS

March 7, 1997 Deposition of Daniel Stephen Bangert

NRG DOCUMENTS

Plaintiffs Response to (1) Defendants' Motion for Summary Judgment on All Claims Based on Defendants' Independent Development of Information Contained in Baker Hughes' Patents; (2) Defendants' Motion for Partial Summary Judgment on NRG'S Fourth and Fifth Causes of Action; and (3) Defendants' Motion for Partial Summary Judgment Based on The Statute of Limitations; and only the affidavit of Stephen A. Graham attached to the above.

Bates Numbers:

NRG0000653-660- October 15, 1991 handwritten notes of Stephen A. Graham regarding his concept.

NRG0004735-4760-January 22, 1992 NRG Summary of Confidential Disclosure: (a “NRG disclosure document”)

BAKER HUGHES DOCUMENTS

Bates Numbers:

B000003-5-December 3, 1991 NRG to S. Watson at Christensen (a “NRG disclosure document”)

PLAINTIFF'S EXHIBITS/DEFENDANT'S EXHIBITS

PX 32- May 10, 1991 Baker Oil Tools Market & Business Development Office Memo from Cameron White to Dave McStravick.

PX 33- October 10, 1991 Office Memorandum from Dan Bangert to Dave McStravick.

PX 63- November 20, 1991 Completion Concept by Ron Curington.

PX 37- December 5, 1991 Eastman Christensen Memorandum from Keith Trichel.

PX 164- December 12, 1991 Exhibit “A” to Confidential Nondisclosure Agreement; (a “NRG disclosure document”).

PX 40- January 3, 1992 Baker Oil Tools Market & Business Development Office Memo form Cameron White to Distribution.

DX 1- January 4, 1992 Disclosure by NRG to Eastman Christensen; (a “NRG disclosure document”).

PX 43- January 10, 1992 Office Memo from Ron Curington to Listed.

PX 5- January 12, 1992 NRG Summary of Confidential Disclosure; (a “NRG disclosure document”).

PX 167- January 15, 1992 Memorandum from Grahame Newton to Rainer Juergens.

DX 15- January 20, 1992 Memorandum from Stephen A. Graham to Grahame Newton regarding Hopkins No. 40-H horizontal drilling project; (a "NRG disclosure document").

PX 65- January 22, 1992 NRG Advantages: Conventional vs. Vertical Wells; (a "NRG disclosure document").

PX 166- January 22, 1992 NRG Summary of Confidential Disclosure; (a "NRG disclosure document").

PX 132- January 25, 1992 NRG Hopkins No. 40-H; (a "NRG disclosure document").

PX 10- January 28, 1992 Baker Oil Tools Market & Business Development Memo from Cameron White to Doug Murray and Tom Tilton.

PX 11- January 28, 1992 Employee Invention Disclosure by Daniel Stephen Bangert.

PX 155- April 12, 1994 United States Patent No. 5,301,760, identifying Stephen A. Graham as Inventor.

PX 4- June 3, 1992 Multilateral Completion; (a "NRG disclosure document").

PX 94- June 21, 1994 United States Patent No. 5,322,127 identifying Robert J. McNair and Daniel S. Bangert as Inventors.

PX 151- Baker Oil Tools Dual Horizontal.

PX 34- Baker Oil Tools Multi-lateral Completion Concept;

PX 85- Baker Oil Tools Advertisement for Multi-lateral Completion System.

PX 86- Baker Oil Tools Advertisement for Multiple Wellbore Completions.



INTERNATIONAL & DOMESTIC
PETROLEUM ENGINEERING
PROJECT MANAGEMENT
FIELD OPERATIONS

SIGMA ENGINEERING CORP.

“EXHIBIT B”

CHARLES R. “RICK” STONE **President**

SUMMARY OF QUALIFICATIONS

- Eighteen years experience in oil and gas operations.
- Pioneered horizontal drilling techniques and tools.
- 1994 SPE Distinguished Lecturer, “Horizontal Underbalanced Drilling”.
- Highly experienced in offshore operations including deepwater drilling.
- Great ability to adapt technology to a current problem.
- Good organizational skills for project management.
- Expert Witness - Drilling and Completion Operations.
- Registered Professional Engineer - Texas.
- Experienced offshore rig equipment inspector.

EXPERIENCE

Sigma Engineering Corporation (1992 - Present)

President and Owner

- Nominated by the Society of Petroleum Engineers (SPE) to be a Distinguished Lecturer (1993 - 1994) on the subject of Underbalanced Drilling.
- Keynote speaker on the subject of horizontal drilling at various symposiums in Brazil, Peru and Mexico.
- Design and supervise the drilling and completion of horizontal wells worldwide.
- Instructor - Horizontal Underbalanced Drilling, Drill Stem Design, Coiled Tubing Operations.
- Expert Witness - various personal injury cases - Drilling Operations.
- Organized International Drilling & Completion Project Management Team.
- Offshore rig equipment inspection.

PetraTex Resources, Inc.

(1990 - 1992)

President and Partner

- Managed office and field personnel.
- Designed and supervised the drilling of three horizontal wells in the Austin Chalk formation.
- Organized the marketing of consulting services on an international basis.
- Secured horizontal engineering contract with Pemex in Mexico.
- Negotiated contracts with Bolivia, Ecuador, Argentina, Indonesia, Iran and Russia.

Oryx Energy Company

(1988 - 1990)

Drilling Engineer - South Texas / Gulf Coast Area

- Designed and drilled two Flores Field wells.
- Organized and designed horizontal drilling and completion programs.
- Devised and implemented a method for Flowdrilling (producing while drilling) horizontal wells in the Austin Chalk formation in Texas.
- Designed and supervised the drilling of 60 horizontal wells in the Pearsall Field of Texas.
- Designed and supervised the drilling of the Stroman Harris #1 Well, setting a world record for horizontal departure.
- Design consultant for a new Rotating Blowout Preventer (RBOP).
- Designed or acted as a design consultant in the drilling of horizontal wells offshore California, onshore California, North Dakota and Northwestern Colorado.

Sun Exploration and Production Company

(1979 - 1988)

Drilling Engineer - Domestic U.S. Offshore (1984 - 1988)

- Provided engineering design and cost estimates for drilling programs.
- Monitored drilling projects on a daily basis for company operated projects.
- Performed daily drilling calculations and made suggestions that increased the efficiency of drilling.
- Wrote and reviewed computer programs which focused on corporate operations efficiency.
- Prepared drilling programs for 21 offshore wells ranging in depth from 5000' to 12000' in water depths up to 3000' and with bottom hole pressures up to 9000 psi.

Production Engineer - Offshore Oil and Gas Production (1981 - 1984)

- Designed 26 workover programs and 6 recompletion programs.
- Provided well economics analysis.
- Designed gas lift systems, gravel packs, wireline programs, and paraffin treatment programs.
- Performed nodal analysis of newly drilled and tested wells to determine downhole equipment and tubing sizes and provided engineering support for an offshore separation facility capable of processing 1.2 BCF of offshore gas per day.

Mechanical Engineer - Offshore Oil and Gas Production (1979 - 1981)

- Research, calculations, recommendations, project organization and supervision of offshore oil and gas processing.
- Designed numerous piping systems, three phase separators, oil pumps, pressure vessel and piping x-ray procedures, saltwater desalination and potable water systems.
- Monitored daily production operations.
- Performed economic and maintenance calculations.

EDUCATION

BS Mechanical Engineering
Texas A & M University; College Station, Texas - 1979

U.S. Air Force 1970-1973

Registered Professional Engineer - Texas - #62319

PAPERS & PRESENTATIONS

- "History and Development of a Rotating Blowout Preventer" SPE #23931 Feb. 1992
- "Flowdrilling in the Pearsall Field" World Oil/Gulf Publishing Sponsored Forum, San Antonio, TX Feb. 1988
- "New Applications for Underbalanced Drilling Equipment" APE #37679, Dec. 1996, Presented Amsterdam SPE Conference 1997.
- "Blowout Preventer Testing For Underbalanced Drilling" Presented 1997 SPE Permian Basin Horizontal Conference Presenters, Midland, TX Sept. 1997

AFFILIATIONS

- Member - Society of Petroleum Engineers
- SPE Distinguished Lecturer, Underbalanced Drilling - 1993-1994
- Well Control Committee Member - Drilling Engineering Association
- Charter Member - Horizontal Drilling Engineers Association
- Founding Member, Board of Advisors - Seair Equipment Inc. which controls wholly owned subsidiaries-Wellhead Systems Inc., Houston Industrial Products Inc. and Turbeco Inc.

NO. 96-31380

NATURAL RESERVES GROUP, INC.,

Plaintiff,

VS.

BAKER HUGHES INCORPORATED, et al.

Defendants.

§
§
§
§
§
§
§

IN THE DISTRICT COURT OF

HARRIS COUNTY, TEXAS

333rd JUDICIAL DISTRICT

AFFIDAVIT OF BERT F. SCALES

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, personally appeared Bert F. Scales, who being first duly sworn, deposed and stated as follows:

1. My name is Bert F. Scales. I am over twenty-one (21) years of age and I am fully competent to make this affidavit. The statements contained in this affidavit are true and correct and are based on personal knowledge.
2. Since 1984 I have been the President of Natural Reserves Group, Inc. ("NRG"), the plaintiff in this cause.
3. Beginning in 1991, NRG had a series of meetings with representatives of the Baker Hughes companies which are named as defendants in this case (the "Baker Hughes defendants"). I attended many of these meetings, which were attended at various times by approximately 26 employees of the Baker Hughes defendants.
4. One of the primary purposes of these meetings was to obtain the Baker Hughes defendants' feedback concerning the NRG Technology that is the subject of this suit. Specifically, NRG wanted to know from the Baker Hughes defendants whether the NRG

EXHIBIT

F

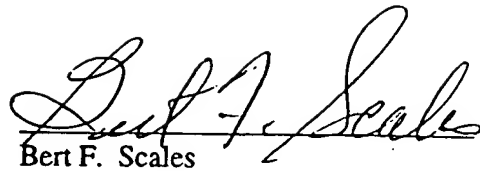
Technology was novel, feasible, patentable, and whether the Baker Hughes defendants were interested in jointly developing the technology with NRG. So that both NRG and the Baker Hughes defendants could disclose their proprietary information, the parties entered into several confidentiality agreements.

5. At almost every one of the meetings, I, or one of the other NRG people who were present, asked the Baker Hughes defendants if they knew of anyone, including themselves, who were using, working on, or trying to develop the technology that NRG was disclosing to them in the meetings. The Baker Hughes defendants answered in the negative, and stated that they considered the NRG technology not only to be viable, but also to be unique, novel, valuable, and patentable.

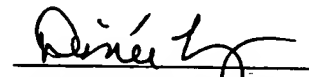
6. Had the Baker Hughes defendants told NRG in January 1992 of their claim to have independently developed the same technology, NRG would have immediately filed a patent application and sought to jointly develop the technology with a different service company.

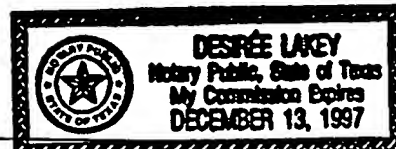
7. NRG finally learned in 1995 that the Baker Hughes defendants had obtained a patent on the NRG Technology, and that the application for the Baker Hughes patent had been filed prior to the application for the NRG patent. The earlier Baker Hughes patent greatly diminished the value of the NRG Technology because it created a tremendous cloud over the validity and exclusivity of the NRG patent. Had NRG filed its patent application in January 1992, months prior to Baker Hughes, the NRG patent would have been much more valuable.

Further affiant sayeth not.


Bert F. Scales

SWORN TO AND SUBSCRIBED BEFORE ME by the said BERT F. SCALES
on this the 30th day of October, 1997.


Notary Public in and for
the State of T E X A S



Printed Name of Notary Public

My commission expires:

12-13-97

NO. 96-31380

NATURAL RESERVES GROUP, INC.,	§	IN THE DISTRICT COURT OF
	§	
Plaintiff, Counter-Defendant,	§	
	§	
v.	§	
	§	
BAKER HUGHES INCORPORATED,	§	
ET AL.,	§	
	§	
Defendants, Counter-Plaintiffs,	§	HARRIS COUNTY, TEXAS
	§	
v.	§	
	§	
HALLIBURTON ENERGY SERVICES,	§	
INC., HALLIBURTON COMPANY,	§	
and SPERRY-SUN DRILLING	§	
SERVICES, INC.,	§	
	§	
Counter-Defendants.	§	333RD JUDICIAL DISTRICT

**STIPULATION BETWEEN NRG AND HALLIBURTON
REGARDING EXCHANGE OF "CONFIDENTIAL" AND
"HIGHLY CONFIDENTIAL" INFORMATION**

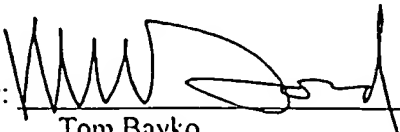
Now comes Plaintiff Natural Reserves Group, Inc. ("NRG") and Counter-Defendants Halliburton Company and Halliburton Energy Services, Inc. (collectively "Halliburton") and enter into the following stipulation:

NRG and Halliburton stipulate and agree to exchange information under the terms of the attached "Agreed Protective Order" entered by the Court on October 11, 1996 with the following revisions:


(a) Any information exchanged by NRG and Halliburton and designated either "Confidential" or "Highly Confidential" shall be treated as "Confidential" as defined in the attached "Agreed Protective Order; and

(b) Paragraph 1(E) shall be revised to delete the reference to "Halliburton Energy Services, Inc." and substitute "Baker Hughes, Inc. and all of its related and affiliated companies."

Respectfully submitted,

By: 
Tom Bayko
Mike Ford
Bayko Gibson Carnegie Hagan
Schoonmaker & Meyer LLP
600 Travis, 50th Floor
Houston, TX 77002-2900

ATTORNEYS FOR PLAINTIFF
NATURAL RESERVES GROUP, INC.

By: 
Jeffrey W. Tayon
State Bar No. 19749300
Leslie V. Payne
State Bar No. 00784736
Conley, Rose & Tayon
600 Travis, Suite 1850
Houston, Texas 77002
Phone: (713) 238-8000
Fax: (713) 238-8008

ATTORNEYS FOR COUNTER-
DEFENDANTS HALLIBURTON
ENERGY SERVICES, INC., and
HALLIBURTON COMPANY

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document was served by hand delivery on:

Glenn A. Ballard, Jr.
Bracewell & Patterson, L.L.P.
South Tower Pennzoil Place
711 Louisiana St., Suite 2900
Houston, Texas 77002-2900

and by certified mail, return receipt requested on:

David G. Mangum
C. Kevin Speirs
Parsons Behle & Latimer
201 South Main St., Suite 1800
P. O. Box 45898
Salt Lake City, Utah 84145-0898

Kurt S. Myers
Law Offices of Kurt S. Myers
7634 Braesdale
Houston, TX 77071

Tom Bayko
Mike Ford
Bayko Gibson Carnegie Hagan
Schoonmaker & Meyer LLP
600 Travis, 50th Floor
Houston, TX 77002-2900

Albert O. Cornelison, Jr.
Associate General Counsel, Litigation
Sperry-Sun Drilling Services, a Baker
Hughes Industries Company, Inc.
2001 Ross Ave.
Dallas, TX 75201

James B. Lewis
Glover, Anderson, Chandler & Uzick
5599 San Felipe, Suite 1600
Houston, TX 77056

on this 24th day of November, 1997.

